

GREATER TORONTO AREA

3Rs ANALYSIS

SOCIAL ENVIRONMENT TECHNICAL

APPENDIX - SCHEDULE F

FINAL - MAY 1994



Ministry of Environment and Energy

Copyright Provisions and Restrictions on Copying:

This Ontario Ministry of the Environment work is protected by Crown copyright (unless otherwise indicated), which is held by the Queen's Printer for Ontario. It may be reproduced for non-commercial purposes if credit is given and Crown copyright is acknowledged.

It may not be reproduced, in all or in part, for any commercial purpose except under a licence from the Queen's Printer for Ontario.

For information on reproducing Government of Ontario works, please contact ServiceOntario Publications at copyright@ontario.ca

**ISBN 0-7778-2032-3 (9v.set)
ISBN 0-7778-2040-4 (this v.)**

**GREATER TORONTO AREA 3Rs ANALYSIS
SOCIAL ENVIRONMENT TECHNICAL APPENDIX - SCHEDULE F**

Prepared by Hardy Stevenson and Associates
for
Fiscal Planning and Information Management Branch
Ministry of Environment and Energy

FINAL - MAY 1994



Ce document technique n'existe qu'en anglais.
Pour obtenir des renseignements en français,
veuillez composer le 1-800-661-9294.

Copyright: Queen's Printer for Ontario, 1994
This publication may be reproduced for non-commercial purposes
with appropriate attribution.

GREATER TORONTO AREA 3Rs ANALYSIS
SOCIAL ENVIRONMENT TECHNICAL APPENDIX

Prepared by Hardy Stevenson and Associates Limited
for
Fiscal Planning and Information Management Branch
Ministry of Environment and Energy

MAY 1994

The report was prepared for the Ontario Ministry of Environment and Energy as part of a Ministry-funded project. Mention of trade names or commercial products does not constitute endorsement or recommendation of their use.

SCHEDULE F

GTA Generic Net Effects Tables

TABLE F1.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

**System
Indicator**

**: Residential Existing
: Potential Effects on Residents**

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Landfill bans may lead to illegal dumping and burning 	<ul style="list-style-type: none"> Enforcement of illegal dumping regulations. Promotion of waste diversion alternatives. Landfill bans may lead to illegal dumping and burning
Residential Recycling and Collection	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop-off depots. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop-off depots.
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities 	<ul style="list-style-type: none"> • Proper management (monitoring) of community and apartment composters. 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Potential health and safety concerns related to the drop-off depots for HHW. 	<ul style="list-style-type: none"> • Mitigation will include proper siting and management of the HHW facility (e.g., siting in areas of compatible land uses and education/promotion). 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma for neighbourhood • Although the research indicates that properly managed composting produces a safe product, there are: Public health concerns, particularly those of the elderly, the very young, those with allergies and nearby workers. (Curtis et al., 1991) • Odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993) 	<ul style="list-style-type: none"> • Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems (Curtis et al., 1991) • MOEE regulations (MOEE, 1994) may not mitigate all of the documented effects. • As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale. 	<ul style="list-style-type: none"> • Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management of the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (con't)		<ul style="list-style-type: none"> · Health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 1993). · Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). · Proper supervision of community composters. 	
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> · Traffic concerns · Visual effect of large bins in plazas · Centres may not be desirable in all areas due to stigma 	<ul style="list-style-type: none"> · Locate Reuse Centres in areas of compatible land use 	<ul style="list-style-type: none"> · Minor potential effect due to traffic and visual effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables. 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre • Potential displacement of residents from the siting of a new facility. 	<ul style="list-style-type: none"> • Mitigation will need to encompass a site selection process and proper management and to avoid or reduce displacement and disruption. • Siting: MRF's should be sited in areas of compatible land use. Avoid residential areas where possible. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage. • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.). • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. If these materials are not kept at the MRF's, storage will be required elsewhere. • Local residents should be on a monitoring/management committee. • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). 	<ul style="list-style-type: none"> • Potential nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near facility. • Potential displacement of residents from the siting of a new facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • Potential for disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre 	<ul style="list-style-type: none"> • Mitigation will need to encompass proper siting and management. • Siting: Depots and transfer stations should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, car traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage (Lesnicki, 1993). • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.). • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required elsewhere. • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). 	<ul style="list-style-type: none"> • Potential minor nuisance effects at some facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations (con't)		<ul style="list-style-type: none"> • Local residents should be on a monitoring/management committee. 	
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F1.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Existing

Indicator: Potential Effects on Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect
Residential Recycling and Collection <ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Elderly and physically challenged may have difficulty in setting out recyclable material. 	<ul style="list-style-type: none"> Provide maximum convenience potential 	<ul style="list-style-type: none"> Elderly and physically challenged may have difficulty in setting out recyclable material.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	No effect	Mitigation not required	No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	Minor nuisance effects associated with odour and physical strain on elderly.	Mitigation not required	Minor nuisance effects associated with odour and physical strain on elderly and physically challenged.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor occupational safety concerns with drivers and handlers of HHW. 	<ul style="list-style-type: none"> • Education program for drivers and handlers of HHW. 	<ul style="list-style-type: none"> • Minor occupational safety concerns with drivers and handlers of HHW.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Although the research (Curtis, et al., 1991) indicates that properly managed composting produces a safe product, there are: Potential health effects on allergy sufferers, people with respiratory ailments, people with immuno-deficiencies, particularly with the elderly and the very young. • Potential employee health concerns (Taylor, 1993) and concerns from nearby workers. 	<ul style="list-style-type: none"> • Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles (Curtis, et al., 1991), appropriate operational procedures should be instituted to maximize this destruction. • Prudence dictates that employees should practise proper hygiene and wear protective clothing. • Health effects monitoring for employees and high-risk residents should be an operational condition. 	<ul style="list-style-type: none"> • Potential exposure of employees at composting facilities to health and safety hazards. Should be minimized by education. Could be mitigated by proper design and control. • Potential health effects on allergy sufferers, people with immuno deficiencies, etc. Magnitude of effect may be minimized by proper siting considerations for new facilities and proper management.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Food contamination issue and liability concerns of donors (Wrigley, 1993). • Potential transfer of pests through reuse centres, exchange days, etc. 	<ul style="list-style-type: none"> • Train food distribution groups in potential contamination/spoilage. • Province should consider "Good Samaritan" Legislation to absolve donor of responsibility. • Cleaning and fumigation of materials, proper health precautions during fumigation and cleaning. 	<ul style="list-style-type: none"> • No effect
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential employee health/safety concerns 	<ul style="list-style-type: none"> • Educate/train employees on health and safety hazards and precautions 	<ul style="list-style-type: none"> • Potential employee health and safety concerns. Should be minimized by mitigation.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • Potential employee health/safety concerns 	<ul style="list-style-type: none"> • Educate/train employees on health and safety hazards and precautions 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F1.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Existing

Indicator: Potential Effects on Community

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Landfill bans may lead to illegal dumping and burning. 	<ul style="list-style-type: none"> Enforcement against illegal dumping. 	<ul style="list-style-type: none"> Landfill bans may lead to illegal dumping and burning.
Residential Recycling and Collection	<ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Potential increase in community pride from participation. Potential minor traffic inconveniences in communities where materials are sorted at the truck. 	<ul style="list-style-type: none"> Planning of haul routes. Education for drivers. 	<ul style="list-style-type: none"> Potential increase in community pride from participation. Potential minor traffic inconveniences in communities where materials are sorted at the truck.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents not served by curbside collections may not use depots and may dump illegally, e.g. couches, mattresses disposed in vacant lots. Could have a negative effect on community image. 	<ul style="list-style-type: none"> • Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them. • Assistance in organization of community garage sales, flea markets etc. • Enforcement against illegal dumping 	<ul style="list-style-type: none"> • Minor negative stigma effect on community image from illegal dumping
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential stigma effect in some communities 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents" 	<ul style="list-style-type: none"> • Potential stigma effect in some communities

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Potential stigma effect in some communities related to location of facilities. 	<ul style="list-style-type: none"> • Location of the reuse centres in suitable land use area 	<ul style="list-style-type: none"> • Potential stigma effect in some communities related to location of facilities.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential stigma and disruption effects in some communities related to operation of MRF's. 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents" • Disruption addressed in Siting and Management of facilities. 	<ul style="list-style-type: none"> • Potential stigma effect in some communities. Magnitude of effect dependent on site location and management of the facility
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • Potential stigma effect in some communities related to location of facilities. 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents" 	<ul style="list-style-type: none"> • Potential stigma effect in some communities. Magnitude of effect dependent on site location and management of the facility

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • Potential increase in community pride 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential increase in community pride

TABLE F1.4
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Existing

Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required
Residential Recycling and Collection	<ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Potential nuisance effects on community features and businesses from traffic and hauling. 	<ul style="list-style-type: none"> Planning and co-ordination of haulage system to minimally disrupt local community features and businesses.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities (USA Today, 1991; Biocycle, 1992). 	<ul style="list-style-type: none"> • Proper management of community and apartment composting 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities (USA Today, 1991; Biocycle, 1992).
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma for neighbourhood • Although the research indicates that properly managed composting produces a safe product, there are: Public health concerns, particularly those of the elderly, the very young, those with allergies and nearby workers (Curtis et al., 1991). • Odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993) 	<ul style="list-style-type: none"> • Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems (Curtis, 1991). MOEE regulations (MOEE, 1994) may not mitigate all of the documented effects. • Composting sites should be located in areas of compatible land use. • State-of-the-art odour control features should be design requirements. Local residents should be on the management/monitoring committees. • As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale. • Health effects could be monitored for workers and for people who work nearby (Taylor, 1993). • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). 	<ul style="list-style-type: none"> • Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Minor nuisance related effects on neighbouring features and businesses • Visual blight/image effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor nuisance effect associated with image.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> - Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - children safety - property devaluation - illegal dumping at centre - Potential displacement of community features (includes cultural heritage resources) and businesses from the siting of a new facility. 	<ul style="list-style-type: none"> - Mitigation will need to encompass a site selection process and proper management. Avoid community features and businesses where possible. - Siting: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage. Cultural heritage resources assessment should be completed. - Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) - Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRFs, storage will be required elsewhere. Local residents should be on monitoring/management committees. 	<ul style="list-style-type: none"> - Potential minor nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near facility. Potential displacement of community features (includes cultural heritage resources) and businesses from the siting of a new facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs (con't)		<ul style="list-style-type: none"> · Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). · Public consultation program established with local residents and representatives of community features/businesses to ensure all concerns and effects are addressed. 	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre 	<ul style="list-style-type: none"> • Mitigation will need to encompass proper siting and management. • Siting: Depots and stations should be sited in areas of compatible land use. The facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, car traffic, noise, truck queuing, litter, and the possibility of excess storage (Lesnicki, 1993). • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots, storage will be required elsewhere. 	<ul style="list-style-type: none"> • Potential minor nuisance effects on community features and businesses at some facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations (con't)		<ul style="list-style-type: none"> • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). • Local residents and community features/businesses representatives should be on a monitoring/management committee. 	
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F1.5
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Existing

Indicator: Potential for Lifestyle Changes

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required
Residential Recycling and Collection	<ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride (Spaccarelli et al, 1989-90). 	<ul style="list-style-type: none"> Ensure the provision of information and educational services for new residents (Environics, 1990). This must be a continual effort to address turnover and increase in future densities (Hager, 1992; Lansana, 1992). Ensure convenience of system, weekly or bi-weekly.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more. • Source of personal and community pride. • Encourages positive local action. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, • Source of personal and community pride.
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more. • Source of personal and community pride. • Encourages positive local action • Inconvenience and annoyance for a minority of people, e.g. ill-fitting lids, insufficient volumes, lack of space, odours, pests, scavenging animals (Environics, 1990; McConnell Weaver, 1993). • Minor inconveniences associated with community composting. • Residents of apartment buildings may experience an increase in insects and rodents, odours and health concerns. 	<ul style="list-style-type: none"> • Address complaints (e.g., ill-fitting lids, insufficient volume) of users. • Provide kitchen containers, home delivery of composters, on-going subsidies (Environics, 1990; McLaren, 1990; Metropolitan Works Committee, 1992). • On-going education for proper use (Town of Markham, 1993). • Site community composters within a short walk of homes. 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride • Potential for minor lifestyle inconveniences associated with backyard composters • Minor inconveniences associated with community composting. • Encourages positive local action.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents not provided with curbside disposal may find the service inconvenient and difficult, resulting in illegal dumping. • Consumers may become much more concerned about size and durability of appliances and furniture • Residents may become more aware of HHW and white goods management and change purchasing behaviour. 	<ul style="list-style-type: none"> • Promote special waste days and special depots for multi-family building collection • Make collection drop-off point convenient for all households and/or continue toxic taxi • Develop promotional/educational materials to emphasize alternatives to HHW for pest control, lawn & garden, cleaning agents, and paint and solvents • Encourage the use of 3Rs for HHW and the separation of HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992) 	<ul style="list-style-type: none"> • Some residents may begin to dump goods illegally. • Residents may become more aware of HHW and white goods management and change purchasing behaviour.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • May contribute to acceptance of using repaired/second hand items rather than buying new products (Quinte Regional Recycling, 1993) • Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness through encouraging communal garage sales, flea markets, bazaars, etc. 	<ul style="list-style-type: none"> • Provide incentives for establishing reuse centres and for holding "garage" sales 	<ul style="list-style-type: none"> • Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products. • Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness through encouraging communal garage sales, flea markets, bazaars, etc.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • Potentially encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change • Could increase demand for packaging reduction (Environics, 1990) 	<ul style="list-style-type: none"> • Expand and refine promotion and education programs to target non-participating groups and to allow for changes in demographic make-up of GTA (Environics, 1990; Morgan-Fraser, 1993). • Promotional/Educational programs should be based on successful programs identified in the 3Rs literature (e.g., Folz & Hazlett, 1990). For example, pamphlets and brochures (in utility bills, etc.) and community information meetings. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. 	<ul style="list-style-type: none"> • Potentially positive effect; encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change

TABLE F1.6
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Existing

Indicator: Potential Effects on Employment

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required
Residential Recycling and Collection	<ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Minor direct employment gains. 	<ul style="list-style-type: none"> Mitigation not required

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> Minor direct employment gains. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor direct employment gains.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> Minor direct employment gains. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor direct employment gains.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor direct increases in construction employment. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor direct increases in construction employment.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

TABLE F1.7
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Existing

Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect
Residential Recycling and Collection	<ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Minor direct economic benefits. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect.
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g., Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

TABLE F1.8
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Existing

Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industries

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect
Residential Recycling and Collection <ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • Landlords may be required to provide space and equipment for composters and may experience increased costs associated with insect and rodent control, staff etc. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential increase in costs for tenants and landlords.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products). • Consumers inconvenienced by lack of curbside disposal for white goods may contribute to a growing market for products which are smaller and more durable. 	<ul style="list-style-type: none"> • Retail stores could develop buy-back programs for large and bulky items. The consumer would then not be required to dispose of the items. 	<ul style="list-style-type: none"> • In the long term institutions and commercial enterprises may develop programs to "buy back" used white goods.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F1.9
GENERIC COMPONENTS NET EFFECTS.

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Existing

Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required
Residential Recycling and Collection	<ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Local residents and businesses may receive a disproportionate share of nuisance effects related to composting for all region residents. 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents" 	<ul style="list-style-type: none"> • Minor negative distribution effect on local communities, population groups and industries who receive a disproportionate share of the effects of facilities.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Positive effect for lower income groups as more low cost items are made available, and adds potential market for these goods. • Positive social welfare benefit. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive effect for lower income groups as more low cost items are made available, and adds potential market for these goods. • Positive social welfare benefit.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near facility as they have a disproportionate share of the negative effects of the facility. 	<ul style="list-style-type: none"> • Effective siting and management of facility. • Effective impact management and compensation program. 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near facility who receive a disproportionate share of nuisance effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<p>Potential minor negative distribution effects on some groups living near facility as they receive a disproportionate share of negative effects.</p>	<p>Mitigation same as above.</p>	<p>Potential minor negative distribution effects on some groups living near facility as they receive a disproportionate share of negative effects.</p>
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<p>No effect</p>	<p>Mitigation not required</p>	<p>No effect</p>

TABLE F1.10
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Existing

Indicator: Distribution of Lifestyle Effects

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Minor lifestyle inconvenience for those who must self-haul 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor lifestyle inconvenience for those who must self-haul
Residential Recycling and Collection <ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Minor lifestyle distributional effect between multi-family and low density development. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor lifestyle distributional effect between multi-family and low density development.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	No effect	Mitigation not required	No effect
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	No effect	Mitigation not required	No effect
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F1.11
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Existing

Indicator: Potential Future Generation Effects of System

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect
Residential Recycling and Collection <ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Positive effect through wiser use of resources and conservation of the environment for the future use/enjoyment of future generations. 	<ul style="list-style-type: none"> Continue to promote and educate on 3Rs (Hay, ND; Lesnicki, 1993; Morgan-Fraser, 1993; Watson, 1993) The likely over-all benefit to future generations needs to be emphasized in promoting these programs. It needs to be stressed that the current generation is willing to make some sacrifices to ensure the future prosperity of their children/grandchildren. 	<ul style="list-style-type: none"> Positive effect through wiser use of resources and conservation of the environment for the future use/enjoyment of future generations.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • Moderately costly to start-up and establish but environmentally beneficial in the long run. Should support change in behaviour to reduction and reuse. 	<ul style="list-style-type: none"> • Promotion and education aimed at increasing future participation rates (Environics, 1990). 	<ul style="list-style-type: none"> • Positive potential effect through support for change in behaviour to reduction and reuse.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Positive effect of providing a healthier environment for the future through support for change in behaviour to repair and reuse and proper disposal. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse and proper disposal.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food-reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Should encourage/support repair and reuse of white goods etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future. 	<ul style="list-style-type: none"> • Province to consider removing Provincial Sales Tax or other provincial taxes for the sale of used goods 	<ul style="list-style-type: none"> • Potential positive effect through the support for repair and reuse of goods, and subsequent reduction of resource use.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Costly to start-up and operate, but environmentally and possibly economically beneficial in the long run. • Required support for recycling. • Current generation paying the cost for altering behaviour to more sustainable behaviour. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future generations with a healthier environment and more resources available.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • Current generation paying cost for altering behaviour to a more sustainable society. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future generations with a healthier environment and more resources available.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • Should have positive effects in changing current attitudes and behaviours to a more sustainable society, which should leave future generations with a healthier environment and more resources available. 	<ul style="list-style-type: none"> • Education material could emphasize the benefits to future generation of 3Rs actions today 	<ul style="list-style-type: none"> • Potential positive effects in changing current attitudes and behaviour to a more sustainable society which should leave future generations with a healthier environment and more resources available.

TABLE F2.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Existing/Committed

Indicator: Potential Effects on Residents

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Effects uncertain with regional recycling legislation. Landfill bans may lead to illegal dumping and burning. 	<ul style="list-style-type: none"> Enforcement of regulations against illegal dumping. Promotion of waste diversion alternatives 	<ul style="list-style-type: none"> Effects uncertain with recycling legislation Landfill bans and regional recycling legislation may lead to illegal dumping and burning.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop-off depots. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop-off depots.
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities. 	<ul style="list-style-type: none"> • Proper management of community and apartment composters 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
<p>Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.).</p> <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<p>Potential health and safety concerns related to the drop-off depots for HHW.</p>	<p>Mitigation will include proper siting and management of the HHW facility (e.g., siting in areas of compatible land uses and education/promotion).</p>	<p>No effect</p>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma for neighbourhood - Health concerns • Although the research indicates that properly managed composting produces a safe product, there are: Public health concerns, particularly those of the elderly, the very young, those with allergies and nearby workers (Curtis et al., 1991) • Odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993) 	<ul style="list-style-type: none"> • Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems (Curtis, et al., 1991). • MOEE regulations (MOEE, 1994) may not mitigate all of the documented effects. • As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale. • Health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 1993). 	<ul style="list-style-type: none"> • Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds, vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management of the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (con't)		<ul style="list-style-type: none"> • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). • Proper supervision of community composters. 	
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Traffic concerns • Visual effect of large bins in plazas • Centres may not be desirable in all areas due to stigma 	<ul style="list-style-type: none"> • Locate reuse centres in areas of compatible land use. 	<ul style="list-style-type: none"> • Minor potential effect due to traffic and visual effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - childrens' safety - property devaluation - illegal dumping at centre • Potential displacement of residents from the siting of a new facility. 	<ul style="list-style-type: none"> • Mitigation will need to encompass a site selection process and proper management. Avoid residential areas, where possible. • Siting: MRF's should be sited in areas of compatible land use and to avoid or reduce displacement and disruption. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage. • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. If these materials are not kept at the MRFs, storage will be required elsewhere. Local residents should be on monitoring/management committees. • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). • Public consultation program established with local residents to ensure all concerns and effects are addressed. 	<ul style="list-style-type: none"> • Potential nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near facility. • Potential displacement of residents from the siting of a new facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre 	<ul style="list-style-type: none"> • Mitigation will need to encompass proper siting and management. • Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, car traffic, noise, visibility, litter, and possibility of excess storage. • Management: The Facility will need to control nuisance effects and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required elsewhere. • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). • Local residents should be on a monitoring/management committee. 	<ul style="list-style-type: none"> • Potential minor nuisance effects at some facilities

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F2.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Existing/Committed

Indicator: Potential Effects on Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors. • Self haul of garbage to landfills and transfer stations by residents. • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Elderly and physically challenged may have difficult time setting out recyclable material for pick-up. 	<ul style="list-style-type: none"> • Provide maximum convenience possible 	<ul style="list-style-type: none"> • Elderly and physically challenged may have difficult time setting out recyclable material for pick-up.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • Minor nuisance effects associated with odour and physical strain on elderly. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor nuisance effects associated with odour and physical strain on elderly.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor occupational safety concerns with drivers and handlers of HHW. 	<ul style="list-style-type: none"> • HHW education for drivers and handlers 	<ul style="list-style-type: none"> • Minor occupational safety concerns with drivers and handlers of HHW.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Although the research (Curtis et al., 1991) indicates that properly managed composting produces a safe product, there are: Potential health effects on allergy sufferers, people with respiratory ailments, people with immuno-deficiencies, particularly with the elderly and the very young. • Potential employee health concerns and concerns from nearby workers (Taylor, 1993). 	<ul style="list-style-type: none"> • Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles (Curtis et al., 1991), appropriate operational procedures should be instituted to maximize this destruction. • Prudence dictates that employees should practise proper hygiene and wear protective clothing. • Health effects monitoring for employees and high-risk residents should be an operational condition. 	<ul style="list-style-type: none"> • Potential exposure of employees at compost facilities to health and safety hazards. Should be minimized by education. Could be mitigated by proper design and control. • Potential health effects on allergy sufferers, people with immuno-deficiencies, etc. Magnitude of effect may be minimized by proper siting considerations for new facilities and proper management.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Food contamination issue and liability concerns of donors (Wrigley, 1993) • Potential transfer of pests through reuse centres, exchange days, etc. 	<ul style="list-style-type: none"> • Train food distribution groups in potential contamination/spoilage. • Province should consider "Good Samaritan" Legislation to absolve donor of responsibility. • Cleaning and fumigation of materials, proper health precautions during cleaning and fumigation. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Potential employee health/safety concerns 	<ul style="list-style-type: none"> Educate/train employees on health and safety hazards and precautions 	<ul style="list-style-type: none"> Potential employee health/safety concerns. Should be minimized by mitigation.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> Drop-off depots for dry recyclables Depots located at transfer stations to provide recycling opportunities to self-haul generators Drop-off depots for multi-family residents not serviced by recycling Drop-off depot for rural households Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> Potential employee health/safety concerns 	<ul style="list-style-type: none"> Educate/train employees on health and safety hazards and precautions 	<ul style="list-style-type: none"> Potential employee health/safety concerns. Should be minimized by mitigation.
Residential Promotion and Education <ul style="list-style-type: none"> 3Rs promotion and education program, focused on the residential sector Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

TABLE F2.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Existing/Committed

Indicator: Potential Effects on Community

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors. • Self haul of garbage to landfills and transfer stations by residents. • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • Landfill bans and recycling legislation may lead to illegal dumping and burning. 	<ul style="list-style-type: none"> • Enforcements against illegal dumping. 	<ul style="list-style-type: none"> • Landfill bans and recycling legislation may lead to illegal dumping and burning.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Potential increase in community pride from participation. • Potential minor traffic inconveniences in communities where materials are sorted at the truck. 	<ul style="list-style-type: none"> • Planning of haul routes. 	<ul style="list-style-type: none"> • Potential increase in community pride from participation. • Potential minor traffic inconveniences in communities where materials are sorted at the truck.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents not served by curbside collections may not use depots and may dump illegally, e.g. couches, mattresses disposed in vacant lots. Could have a negative effect on community image. 	<ul style="list-style-type: none"> • Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them. • Assistance in organization of community garage sales, flea markets, etc. • Enforcement against illegal dumping 	<ul style="list-style-type: none"> • Minor negative stigma effect on community image from illegal dumping
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential stigma effect in some communities 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents" 	<ul style="list-style-type: none"> • Potential stigma effect in some communities

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Potential stigma effect in some communities related to location of facilities. 	<ul style="list-style-type: none"> • Location of the reuse centres in suitable land use area. 	<ul style="list-style-type: none"> • Potential stigma effect in some communities related to location of facilities.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential stigma and disruption effect in some communities related to operation of MRF's. 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents" • Disruption addressed in siting and management of facilities. 	<ul style="list-style-type: none"> • Potential stigma effect in some communities. Magnitude of effect dependant on site location and management of the facility

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential stigma effect in some communities related to location of facilities. 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents" 	<ul style="list-style-type: none"> • Potential stigma effect in some communities. Magnitude of effect dependant on site location and management of the facility
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • Potential increase in community pride 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential increase in community pride

TABLE F2.4
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Existing/Committed

Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors. • Self haul of garbage to landfills and transfer stations by residents. • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Potential nuisance effects on community features and businesses from traffic and hauling. 	<ul style="list-style-type: none"> • Planning and co-ordination of haulage system to minimally disrupt local community features and businesses 	<ul style="list-style-type: none"> • Potential nuisance effects on community features and businesses from traffic and hauling.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities (USA Today, 1991; Biocycle, 1992). 	<ul style="list-style-type: none"> • Proper management of facilities. 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma for neighbourhood • Although the research indicates that properly managed composting produces a safe product, there are: Public health concerns particularly those of the elderly, the very young, those with allergies and nearby workers (Curtis et al., 1991). Odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993). 	<ul style="list-style-type: none"> • Existing facilities: Proper management of the material must be maintained to reduce odour and scavenging animal problems (Curtis, 1991). MOEE regulations (MOEE, 1994) may not mitigate all of the documented effects. • Composting sites should be located in areas of compatible land use. • State-of-the-art odour control features should be design requirements. People who work at local businesses and features should be on the monitoring/management committees (Lesnicki, 1993). • As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale. 	<ul style="list-style-type: none"> • Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds, vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (cont'd)		<ul style="list-style-type: none"> • Health effects could be monitored over an initial period at the required facility for workers and for people who work nearby (Taylor, 1993). • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). 	
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Minor nuisance related effects on neighbouring features and businesses • Visual blight/image effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor nuisance effect associated with image

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - childrens' safety - property devaluation - illegal dumping at centre • Potential displacement of community features (including cultural heritage resources) and businesses from the siting of a new facility. 	<ul style="list-style-type: none"> • Mitigation will need to encompass a site selection process and proper management. Avoid community features and businesses where possible. • Siting: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage. A cultural heritage resource assessment should be completed. • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRFs, storage will be required elsewhere. 	<ul style="list-style-type: none"> • Potential nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near facility. • Potential displacement of community features and businesses from the siting of a new facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance related effects on nearby features and businesses <ul style="list-style-type: none"> - Litter - Visual - Traffic, truck queuing - Noise - Child safety - Property devaluation - Illegal dumping 	<ul style="list-style-type: none"> • Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, car traffic, noise, litter, and possibility of excess storage. • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots, storage will be required elsewhere. Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements in siting, design operations and technology). 	<ul style="list-style-type: none"> • Potential minor nuisance effects on community features and businesses at some facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F2.5
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Existing/Committed

Indicator: Potential for Lifestyle Changes

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Potential positive social and lifestyle effect, people willing to do and learn more. • Source of personal and community pride (Spaccarelli, et al., 1989-90). 	<ul style="list-style-type: none"> • Ensure convenience of system, weekly or bi-weekly. • Ensure the provision of information and educational services for new residents (Environics, 1990). This must be a continual effort to address turnover and increase in future densities (Hager, 1992; Lansana, 1992). 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more. • Source of personal and community pride. • Encourages positive local action. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more. • Source of personal and community pride.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride • Encourages positive local action • Inconvenience and annoyance for a minority of people e.g. ill-fitting lids, insufficient volumes, lack of space, odours, pests, scavenging animals (Environics, 1990; McConnell Weaver, 1993) • Minor inconveniences associated with community composting. • Residents of apartment buildings may experience an increase in insects and rodents, odours and health concerns. 	<ul style="list-style-type: none"> • Address complaints (e.g., ill-fitting lids, insufficient volume) of users. • Provide kitchen containers, home delivery of composters, on-going subsidies (Environics, 1990; Maclarens, 1990; Metropolitan Works Committee, 1992). • On-going education for proper use (Town of Markham, 1993). • Site community composters within a short walk of homes. 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. • Potential for minor lifestyle inconveniences associated with backyard composters. • Minor inconveniences associated with community composting. • Encourages positive local action.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents without curbside disposal may find the service inconvenient and difficult, resulting in illegal dumping. • Consumers may become much more concerned about size and durability of appliances and furniture. • Residents may become more aware of HHW and white goods management and change purchasing behaviour. 	<ul style="list-style-type: none"> • Promote special waste days and special depots for multi-family building collection. • Make collection drop-off point convenient for all households and/or continue toxic taxi. • Develop promotional/educational materials to emphasize alternatives to HHW for pest control, lawn & garden, cleaning agents, and paint and solvents. • Encourage the use of 3Rs for HHW and the separation of HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992). 	<ul style="list-style-type: none"> • Residents may become more aware of HHW and white goods management and change purchasing behaviour.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • May contribute to acceptance of using repaired/second hand items rather than buying new products (Quinte Regional Recycling, 1993) • Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness through encouraging communal garage sales, flea markets, bazaars, etc. 	<ul style="list-style-type: none"> • Provide incentives for establishing reuse centres and for holding "garage" sales. 	<ul style="list-style-type: none"> • Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products • Increased appeal and household economic benefits with future demographic changes. • Can contribute to neighbourhood cohesiveness through communal garage sales, flea markets, bazaars, etc.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • Potentially encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change • Could increase demand for packaging reduction (Environics, 1990). 	<ul style="list-style-type: none"> • Expand and refine promotion/education programs to target non-participating groups and to allow for changes in demographic make-up of GTA (Environics, 1990; Morgan-Fraser, 1993). • Promotional/Educational programs should be based on successful programs identified in the 3Rs literature (e.g., Folz & Hazlett, 1990). For example, pamphlets and brochures (in utility bills, etc.) and community information meetings. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. Many school boards have environmental education committees. 	<ul style="list-style-type: none"> • Potentially positive effect; encourages changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change

TABLE F2.6
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Existing/Committed

Indicator: Potential Effects on Employment

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor direct employment gains 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor direct increase in construction employment. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor direct increase in construction employment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

TABLE F2.7
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Existing/Committed

Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors. • Self haul of garbage to landfills and transfer stations by residents. • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	Minor direct economic benefits.	Mitigation not required	Minor direct economic benefits.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

TABLE F2.8
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Existing/Committed

Indicator : Potential Operational Effects on Institutions, Commercial Enterprises and Industries

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect
Residential Recycling and Collection <ul style="list-style-type: none"> Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations Curbside collection of additional dry materials Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Landlords of multi-family buildings of greater than six units are required to provide space, facilities and staff time to accommodate recycling and may incur additional costs. 	<ul style="list-style-type: none"> Province to consider additional costs for recycling in annual rent review application. 	<ul style="list-style-type: none"> Potential increase in costs for landlords and tenants

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • Landlords may be required to provide space and equipment for composters and may experience increased costs associated with insect and rodent control, staff, etc. 	<ul style="list-style-type: none"> • Landlords to include increase in costs associated with composting services in annual rent review applications. 	<ul style="list-style-type: none"> • Potential increase in costs for tenants and landlords.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products). • Consumers inconvenienced by lack of curbside disposal for white goods may contribute to a growing market for, products which are smaller and more durable. 	<ul style="list-style-type: none"> • Retail stores could develop buy-back programs for large and bulky items. The consumer would then not be required to dispose of items. 	<ul style="list-style-type: none"> • In the long term institutions and commercial enterprises may develop programs to "buy back" used white goods

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F2.9
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Existing/Committed

Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
<ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors. • Self haul of garbage to landfills and transfer stations by residents. • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	No effect	Mitigation not required	No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	No effect	Mitigation not required	No effect
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	Local residents and businesses may receive a disproportionate share of nuisance effects related to composting for all region residents.	Mitigation as "Potential Effects on Residents".	Negative distribution effect on some local communities, population groups and industries, who receive a disproportionate share of effects of the facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Potential positive effect for lower income groups as more low cost items available and adds potential market for these goods. • Positive social welfare benefit. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential positive effect for lower income groups as more low cost items available and adds potential market for these goods. • Positive social welfare benefit.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near facility as they have a disproportionate share of the negative effects of the facility. 	<ul style="list-style-type: none"> • Effective siting and management of facility. • Effective impact management and compensation program. 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near facility who receive a disproportionate share of nuisance effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential minor negative distribution effects on some groups living near facility as they receive a disproportionate share of negative effects. 	<ul style="list-style-type: none"> • Mitigation same as above. 	<ul style="list-style-type: none"> • Potential minor negative distribution effects on some groups living near facility as they receive a disproportionate share of negative effects.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F2.10
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Existing/Committed

Indicator: Distribution of Lifestyle Effects

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Minor lifestyle inconvenience for those who must self-haul 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor lifestyle inconvenience for those who must self-haul

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Minor lifestyle distributional effect between multi-family and low density development 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor lifestyle distributional effect between residents of multi-family and low density developments.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables. 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F2.11
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Existing/Committed

Indicator: Potential Future Generation Effects of System

Component Category/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Positive effect through wiser use of resources for the use/enjoyment of future generations. 	<ul style="list-style-type: none"> • Continue to promote and educate on 3Rs (Hay, ND; Lesnicki, 1993; Morgan-Fraser, 1993; Watson, 1993) • The likely over-all benefit to future generations needs to be emphasized in promoting these programs. It needs to be stressed that the current generation is willing to make some sacrifices to ensure the future prosperity of their children/grandchildren. 	<ul style="list-style-type: none"> • Potential positive effect through wiser sustainable use of resources and conservation of the environment for future use/enjoyment.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • Moderately costly to start-up and establish but environmentally beneficial in the long run. Should support change in behaviour to reduction and reuse. 	<ul style="list-style-type: none"> • Promotion and education aimed at increasing future participation rates (Envirronics, 1990). 	<ul style="list-style-type: none"> • Positive potential effect of passing on a healthier environment through support for change in behaviour to reduction and reuse.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse and proper disposal. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse and proper disposal.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Should encourage/support repair and reuse of white goods etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future. 	<ul style="list-style-type: none"> • Province could consider removing Provincial Sales Tax or other provincial taxes for the sale of used goods 	<ul style="list-style-type: none"> • Potential positive effect through the support for repair and reuse of goods, and subsequent reduction of resource use.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Costly to start-up and establish because of market development, but environmentally and possibly economically beneficial in the long run. • Current generation paying the cost for altering behaviour to more sustainable behaviour. Required support for recycling. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future generations with a healthier environment and more resources available.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<p>Current generation behaviour paying cost for altering behaviour to a more sustainable society.</p>	<p>Mitigation not required</p>	<p>Minor positive effect as the current generation is paying the cost for changing to more sustainable behaviour which should leave future generations with a healthier environment and more resources available.</p>
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<p>Should have positive effects in changing current attitudes and behaviours to a more sustainable society which should leave future generations with cleaner environment and more resources available.</p>	<p>Education material could emphasize the benefits to future generation of 3Rs actions today</p>	<p>Positive effects in changing current attitudes and behaviour to a more sustainable society which should leave future generations with cleaner environment and more resources available.</p>

TABLE F3.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

System : Residential Direct Cost

CRITERION : Potential Local Community Impacts

Indicator: Potential Effects on Residents

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads • Direct cost system for garbage collection 	<ul style="list-style-type: none"> • Effects uncertain with regional recycling legislation • Landfill bans may lead to illegal dumping and burning. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Effects uncertain with regional recycling legislation • Landfill bans may lead to illegal dumping and burning.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop-off depots. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop-off depots.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Potential for odour and vermin effects at apartments from 3 bin composting units and at community composting facilities. 	<ul style="list-style-type: none"> • Proper management of community and apartment composters 	<ul style="list-style-type: none"> • Potential for odour and vermin effects at apartments from 3 bin composting units and at community composting facilities.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Potential health and safety concerns related to the drop-off depots for household hazardous waste. 	<ul style="list-style-type: none"> • Mitigation will include and proper siting and management of the HHW facility (e.g., siting in areas of compatible land uses) and education/promotion. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma for neighbourhood - health concerns <p>(Morgan-Frazer, 1993; Lesnicki, 1993; Scott, 1993; Dale, 1993; Cuthill and Taylor, 1993).</p> <ul style="list-style-type: none"> • Public health concerns, particularly those of the elderly, the very young, those with allergies and nearby workers (Curtis, 1991). • Potential odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993). • Potential displacement of residents from the siting of a new facility. 	<ul style="list-style-type: none"> • Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems (Curtis, 1991). MOEE regulations (MOEE, 1994) may not mitigate all of the documented effects. • Composting sites should be located in areas of compatible land use. The siting considerations for these types of facilities should address: odour, heavy truck traffic, truck queuing nuisance and litter. State-of-the-art odour control features should be design requirements. Local residents should be on the management/monitoring committees (Lesnicki, 1993). • As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale. • Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992). However, health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 1993). 	<ul style="list-style-type: none"> • Potential displacement of residents from the siting of a new facility. • Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds, vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management of the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (con't)	<ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). 	
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Traffic concerns • Visual effect of large bins in plazas • Centres may not be desirable in all areas due to stigma 	<ul style="list-style-type: none"> • Locate Reuse Centres in areas of compatible land use 	<ul style="list-style-type: none"> • Minor potential traffic and visual effects possible.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre • Potential displacement of residents from the siting of a new facility. 	<ul style="list-style-type: none"> • Mitigation will need to encompass a site selection process and proper management. Avoid residential areas where possible. • Siting: MRF's should be sited in areas of compatible land use and to avoid or reduce displacement and disruption. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage. • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. If these materials are not kept at the MRFs, storage will be required elsewhere. Local residents should be on monitoring/management committees. Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). • Public consultation program established with local residents to ensure all concerns and effects are addressed. 	<ul style="list-style-type: none"> • Potential displacement of residents from the siting of a new facility. • Minor nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
<p>Residential Recycling Depots and Transfer Stations</p> <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots). 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre 	<ul style="list-style-type: none"> • Mitigation will need to encompass proper siting and management. • Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, car traffic, noise, visibility, litter, and possibility of excess storage. • Management: The Facility will need to control nuisance effects and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required elsewhere. 	<ul style="list-style-type: none"> • Potential minor nuisance effects at some facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F3.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Direct Cost

Indicator: Potential Effects on Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads • Direct cost system for garbage collection 	<ul style="list-style-type: none"> • If system not weight-based, handlers may risk injury dealing with extraordinarily heavy bags/containers. 	<ul style="list-style-type: none"> • Risk to handlers should be monitored. • Advantages and disadvantages of weight-based systems should be evaluated to determine viability. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Elderly/physically challenged may have difficult time setting out recyclables and for pick-up. 	<ul style="list-style-type: none"> • Provide maximum convenience possible. 	<ul style="list-style-type: none"> • Inconveniences for elderly and physically challenged.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor nuisance effects associated with odour and physical strain on elderly. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor nuisance effects associated with odour and physical strain on elderly.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Potential occupational safety concerns with drivers and handlers of HHW. 	<ul style="list-style-type: none"> • HHW education for drivers and handlers. 	<ul style="list-style-type: none"> • Minor occupational safety concerns with drivers and handlers of HHW.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Although the research (Curtis et al., 1991) indicates that properly managed composting produces a safe product, there are: • Potential health effects on allergy sufferers, people with respiratory ailments, people with immuno-deficiencies, particularly with the elderly and the very young. • Potential employee health concerns (Taylor, 1993) and concerns from nearby workers. 	<ul style="list-style-type: none"> • Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles (Curtis et al., 1991), appropriate operational procedures should be instituted to maximize this destruction. • Prudence dictates that employees should practise proper hygiene and wear protective clothing. • Health effects monitoring for employees and high-risk residents should be an operational condition. 	<ul style="list-style-type: none"> • Employees at compost facilities may be exposed to health and safety hazards. Should be minimized by education. Could be mitigated by proper design and control. • Potential for health effects on allergy sufferers, people with immuno-deficiencies, etc. Magnitude of effect may be minimized by proper siting considerations for new facilities and proper management.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Food contamination issue and liability concerns of donors (Wrigley, 1993). • Potential transfer of pests through reuse centres, exchange days, etc. 	<ul style="list-style-type: none"> • Train food distribution groups in potential contamination/spoilage. • Province should consider "Good Samaritan" Legislation to absolve donor of responsibility. • Cleaning and fumigation of materials; proper health precautions during cleaning and fumigation. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Potential employee health/safety concerns 	<ul style="list-style-type: none"> Educate/train employees on health and safety hazards and precautions. 	<ul style="list-style-type: none"> Potential employee health/safety concerns should be minimized by mitigation.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> Drop-off depots for dry recyclables Depots located at transfer stations to provide recycling opportunities to self-haul generators Drop-off depots for multi-family residents not serviced by recycling Drop-off depot for rural households Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> Potential employee health/safety concerns 	<ul style="list-style-type: none"> Educate/train employees on health and safety hazards and precautions. 	<ul style="list-style-type: none"> Potential employee health/safety concerns should be minimized by mitigation.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	No effect	Mitigation not required	No effect

TABLE F3.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Direct Cost

Indicator: Potential Effects on Community

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads Direct cost system for garbage collection 	<ul style="list-style-type: none"> Potential for public opposition to direct cost (e.g. Peterborough). Potential for illegal dumping/burning as resistance to direct cost (Alderden, 1990; RIS, 1990; Thiverge, 1992; Skumatz and Zack, 1993) and because of landfill bans and recycling legislation. 	<ul style="list-style-type: none"> Programs need to be actively promoted and explained to counter possible negative reactions (e.g. Town of Kanata public consultation). Mitigation and enhancement by variable rate schemes, enforcement, expanded 3Rs, etc. 	<ul style="list-style-type: none"> Potential for illegal dumping/burning as resistance to direct cost (Alderden, 1990; RIS, 1990; Thiverge, 1992; Skumatz and Zack, 1993) and because of landfill bans and recycling legislation. Mitigation and enhancement by public consultation, variable rate schemes, enforcement, expanded 3Rs, etc. should reduce effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Potential increase in community pride from participation, but potential decrease in pride if illegal dumping and burning are prevalent. • Potential minor traffic inconvenience in communities where materials are sorted at the truck. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential increase in community pride from participation, but potential decrease in pride if dumping and burning are prevalent. • Potential minor traffic inconvenience in communities where materials are sorted at the truck.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents not served by curbside collections may not use depots and dump illegally, e.g. couches, mattresses disposed in vacant lots. Could have a negative effect on community image. 	<ul style="list-style-type: none"> • Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them. • Assistance in organization of community garage sales, flea markets etc. • Enforcement against illegal dumping. 	<ul style="list-style-type: none"> • Minor negative community stigma effect on community image from illegal dumping.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential stigma effect in some communities. 	<ul style="list-style-type: none"> • State-of-the-art odour control should be an operational condition 	<ul style="list-style-type: none"> • Potential stigma effect in some communities

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Potential stigma effect in some communities. 	<ul style="list-style-type: none"> • Location of the reuse centres in suitable land use area 	<ul style="list-style-type: none"> • Potential stigma effect in some communities.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential stigma and disruption effect in some communities. • Mitigation same as "Potential Effects on Residents". 	<ul style="list-style-type: none"> • Stigma and disruption addressed in siting and management of facilities. 	<ul style="list-style-type: none"> • Potential stigma effect and disruption in some communities. Magnitude of effect dependant on site location and management of the facility. • Mitigation same as "Potential Effects on Residents".

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables, household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential stigma effect in some communities. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential stigma effect in some communities.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Potential increase in community pride 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential increase in community pride

TABLE F3.4
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Direct Cost

Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads • Direct cost system for garbage collection 	<ul style="list-style-type: none"> • Potential for illegal dumping in waste containers of businesses and institutions due to opposition to direct cost (Eckstram and LaBarre, 1992; Krivitz and Schmidt, 1992). 	<ul style="list-style-type: none"> • Greater enforcement by municipality and preventive measures to be taken by business and institutions (e.g., lids on bins). 	<ul style="list-style-type: none"> • Potential for illegal dumping in waste containers of businesses and institutions due to opposition to direct cost (Eckstram and LaBarre, 1992; Krivitz and Schmidt, 1992).

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Potential nuisance effects on community features and businesses from traffic and hauling. 	<ul style="list-style-type: none"> • Planning and co-ordination of haulage system to minimally disrupt local community features and businesses. 	<ul style="list-style-type: none"> • Potential minor nuisance effects on community features and businesses from traffic and hauling.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities. 	<ul style="list-style-type: none"> • Proper management of community composting. 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community composting facilities.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma <p>(Morgan-Frazer, 1993) (Lesnicki, 1993; Scott, 1993; Dale, 1993; Cuthill and Taylor, 1993).</p> <ul style="list-style-type: none"> • Potential odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993). • Potential displacement of businesses and community features (including cultural heritage resources) from siting of new facility. 	<ul style="list-style-type: none"> • Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems (Curtis, 1991). • MOEE regulations (MOEE, 1994). Do not appear to mitigate all of the documented effects. • Composting sites should be located in areas of compatible land use. The siting considerations for these types of facilities should address: odour, heavy truck traffic, truck queuing, noise and litter, and a cultural heritage resource assessment. • State-of-the-art odour control features should be design requirements. Local residents should be on the management/monitoring committees (Lesnicki, 1993). 	<ul style="list-style-type: none"> • Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds, vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Minor nuisance related effects on neighbouring features and businesses • Visual blight/image effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping - stigma • Potential displacement of community features (including cultural heritage resources) and businesses from siting new facilities. 	<ul style="list-style-type: none"> • Mitigation will need to encompass a site selection process and proper management. Avoid community features and businesses where possible. • Siting: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage. A cultural heritage resources assessment should be completed. • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRFs, storage will be required elsewhere. • Local residents should be on a monitoring/management committee. 	<ul style="list-style-type: none"> • Potential displacement of community features and businesses from siting of a new facility. • Minor nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> Potential disruption from nuisance related effects on nearby features and businesses: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping 	<ul style="list-style-type: none"> Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, car traffic, noise, litter, and possibility of excess storage. Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required elsewhere. 	<ul style="list-style-type: none"> Minor nuisance effects on community features and businesses at some facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	No effect	Mitigation not required	No effect

TABLE F3.5
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Direct Cost

Indicator: Potential for Lifestyle Changes

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads Direct cost system for garbage collection <p>Could support 3Rs by encouraging residents to source separate to reduce the amount of garbage (Cuboniss, 1993; Environics, 1990).</p> <p>People may spend more time diverting, compacting or dumping waste in order to avoid paying (RIS, 1990; Alderden, 1990; Krivit and Schmidt, 1992).</p>	<p>Complement direct cost with timely promotion/education program and public consultation program (e.g., Town of Kanata, 1993).</p>	<ul style="list-style-type: none"> Could support 3Rs by encouraging residents to source separate to reduce the amount of garbage People may spend more time diverting, compacting or dumping waste in order to avoid paying (RIS, 1990; Alderden, 1990; Krivit and Schmidt, 1992).

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Greater potential for people to place wrong items in Blue Box as residents maximize its use. • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride (Spaccarelli et al, 1989-90). 	<ul style="list-style-type: none"> • Ensure convenient location of drop-off point for apartment dwellers. • Assistance in the development of 3Rs apartment committees, "Welcome Wagons", etc. • Ensure the provision of information and educational services for new residents (Environics, 1990). This must be a continual effort to address turnover and increase in future densities (Hager, 1992; Lansana, 1992). • Ensure convenience of system, weekly or bi-weekly. 	<ul style="list-style-type: none"> • Greater potential for people to place wrong items in Blue Box as residents maximize its use. • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. • Encourages positive local action. • Inconvenience and annoyance for a minority of people, e.g. ill-fitting lids, insufficient volumes, lack of space, odours, pests, scavenging animals (Environics, 1990; McConnell Weaver, 1993). • Promotion of vermicomposting in apartments should increase awareness of role of apartment residents in 3Rs and may lead to greater support for and involvement in 3Rs. • Residents of apartment buildings may experience an increase in vermin and odour and health concerns. • Minor inconveniences associated with community and apartment composting. 	<ul style="list-style-type: none"> • Address complaints (e.g., ill-fitting lids, insufficient volume) of users. • Provide kitchen containers, home delivery of composters, on-going subsidies (Environics, 1990; Maclarens, 1990; Metropolitan Works Committee, 1992). • Target apartments with promotion/education programs and consultation program to maximize participation - modify composting program/components as required. • Ongoing education for proper use (Town of Markham, 1993). 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. • Variety of lifestyle inconveniences. • Encourages positive local action.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • White goods disposal appears to be increasingly inconvenient and difficult where curbside service is not provided, resulting in illegal dumping. • Consumers may become much more concerned about size and durability of appliances and furniture. • Residents may become more aware of HHW and white goods management and change purchasing behaviour. 	<ul style="list-style-type: none"> • Promote special waste days and special depots for multi-family building collection • Make collection drop-off point convenient for all households and/or continue toxic taxi • Develop promotional/educational materials to emphasize alternatives to HHW for pest control, lawn & garden, cleaning agents, and paint and solvents. Encourage the use of 3Rs for HHW and the separation of HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992). 	<ul style="list-style-type: none"> • Residents may become more aware of HHW and white goods management and change purchasing behaviour.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • May contribute to acceptance of using repaired/second hand items rather than buying new products (Quinte Regional Recycling, 1993). • Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness through communal garage sales, flea markets, bazaars, etc. 	<ul style="list-style-type: none"> • Provide incentives for establishing reuse centres and for holding "garage" sales. 	<ul style="list-style-type: none"> • Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products. In some instances, has social welfare benefits. • Increased appeal and household economic benefits with future demographic changes. May contribute to neighbourhood cohesiveness through communal garage sales, flea markets, bazaars, etc.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Potentially encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change. • Could increase demand for packaging reduction (Environics, 1990; Proctor and Redfern Ltd., 1993a; Ekos Research Assoc., 1993a). 	<ul style="list-style-type: none"> • Expand and refine promotion/education programs to target non-participating groups and to allow for changes in demographic make-up of GTA (Environics, 1990; Morgan-Fraser, 1993). • Promotional/Educational programs should be based on successful programs (e.g., Folz & Hazlett, 1990). For example, pamphlets and brochures (in utility bills, etc.) and community information meetings. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. The role of the schools could be important, particularly for new Canadians whose children are receiving the only English instruction in the family. Many School Boards have environmental education committees. 	<ul style="list-style-type: none"> • Potentially positive effect; encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change.

TABLE F3.6
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Direct Cost

Indicator: Potential Effects on Employment

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads • Direct cost system for garbage collection 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor direct employment effect in these programs. Magnitude and timing of effects is uncertain. 	<ul style="list-style-type: none"> • A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude, e.g., Roundtables on the Economy and the Environment (MOEE, 1993b; CFIB, 1991). Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy. 	<ul style="list-style-type: none"> • Minor direct employment effect in these programs. Magnitude, and timing of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor direct increase in construction employment. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor direct increase in construction employment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

TABLE F3.7
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Direct Cost

Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads Direct cost system for garbage collection 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

TABLE F3.8
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Direct Cost

Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industries

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads Direct cost system for garbage collection 	<ul style="list-style-type: none"> Potential increase in cost for landlords of multi-family buildings that are covered under Direct Cost. 	<ul style="list-style-type: none"> Landlord to work with residents on implementing Direct Cost. 	<ul style="list-style-type: none"> Potential increase in cost for landlords of multi-family buildings that are covered under Direct Cost.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	Landlords of multi-family buildings of greater than six units will need to provide space, facilities and staff time to accommodate recycling and may incur additional costs.	Province to consider the additional costs for recycling in annual rent review application.	Potential small increase in costs for landlords and tenants.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	Landlords may be required to provide space and equipment for composters and may experience increased costs associated with insect and rodent control, staff etc.	Landlords to include increase in costs associated with composting services in annual rent review applications.	Potential increase in costs for tenants and landlords
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products). Consumers inconvenienced by lack of curbside disposal for white goods may contribute to a growing market for products which are smaller and more durable.	Retail stores could develop buy-back programs for large and bulky items. The consumer would then not be required to dispose of the items.	In the long term, institutions and commercial enterprises may develop programs to "buy back" used white goods.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	No effect	Mitigation not required	No effect
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F3.9
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Direct Cost

Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads • Direct cost system for garbage collection 	<ul style="list-style-type: none"> • There could be a negative distribution effect as costs for garbage collection may not be affordable for lower-income households. 	<ul style="list-style-type: none"> • Advise residents of the reasons for direct cost (cost savings). 	<ul style="list-style-type: none"> • There could be a negative distribution effect as costs for garbage collection may not be affordable for lower-income households.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation no required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Local residents and businesses may receive a disproportionate share of nuisance effects related to composting for all region residents. 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents". 	<ul style="list-style-type: none"> • Negative distribution effect on some local communities, population groups and industries who receive a disproportionate share of the effects of the facilities.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Positive effect for lower income groups as more low cost items available and adds potential market for these goods. • Positive social welfare benefits 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive effect for lower income groups as more low cost items available and adds potential market for these goods. • Positive social welfare benefit
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near facility, as they have a disproportionate share of the negative effects of the facility. 	<ul style="list-style-type: none"> • Effective siting and management of facility. • Effective impact management and compensation program. 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near facility who receive a disproportionate share of nuisance effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential minor negative distribution effects on some groups living near facility as they receive a disproportionate share of negative effects. 	<ul style="list-style-type: none"> • Effective siting and management of facility. • Effective impact management and compensation program. 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near facility, as they receive a disproportionate share of negative effects.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F3.10
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Direct Cost

Indicator: Distribution of Lifestyle Effects

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads • Direct cost system for garbage collection 	<ul style="list-style-type: none"> • Minor lifestyle inconvenience for those who must self-haul. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor lifestyle inconvenience for those who must self-haul.

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Minor lifestyle distributional effects between multi-family and low density development. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor lifestyle distributional effects between multi-family and low density development.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	No effect	Mitigation not required	No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	No effect	Mitigation not required	No effect
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	No effect	Mitigation not required	No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effect
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	No effect	Mitigation not required	No effect
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	No effect	Mitigation not required	No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	No effect	Mitigation not required	No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	No effect	Mitigation not required	No effect

TABLE F3.11
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Direct Cost

Indicator: Potential Future Generation Effects of System

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads • Direct cost system for garbage collection 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Positive effect through wiser use of resources and conservation of the environment for future use\enjoyment. 	<ul style="list-style-type: none"> • Continue to promote and educate on 3Rs (Hay, ND; Lesnicki, 1993; Morgan-Fraser, 1993; Watson, 1993). • The likely over-all benefit to future generations needs to be emphasized in promoting these programs. It needs to be stressed that the current generation is willing to make some sacrifices to ensure the future prosperity of their children/grandchildren. 	<ul style="list-style-type: none"> • Positive effect through wiser use of resources and conservation of the environment for future use/enjoyment.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<p>Moderately costly to start-up and establish but environmentally beneficial in the long run. Should support change in behaviour to reduction and reuse.</p>	<p>Promotion and education aimed at increasing future participation rates (Environics, 1990).</p>	<p>Positive potential effect of passing on a healthier environment through support for change in behaviour to reduction and reuse.</p>
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<p>Positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse, and proper disposal.</p>	<p>Mitigation not required</p>	<p>Positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse, and proper disposal.</p>
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<p>No effect</p>	<p>Mitigation not required</p>	<p>No effect</p>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Should encourage/support repair and reuse of white goods etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future. 	<ul style="list-style-type: none"> • Province to consider removing Provincial Sales Tax or other provincial taxes for the sale of used goods. 	<ul style="list-style-type: none"> • Positive effect through the support for repair and reuse of goods and subsequent reduction of resource use.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Costly to start-up and operate because of market development, but environmentally and possibly economically beneficial in the long run. • Current generation paying the cost for altering behaviour to a more sustainable behaviour. Required support for recycling. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future generations with a healthier environment and more resources available.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<p>Current generation behaviour paying cost for altering behaviour to a more sustainable society.</p>	<p>Mitigation not required</p>	<p>Minor positive effect as the current generation is paying the cost for changing to more sustainable behaviour which should leave future generations with a healthier environment and more resources available.</p>
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<p>Should have positive effects in changing current attitudes and behaviours to a more sustainable society which should leave future generations with a healthier environment and more resources available.</p>	<p>Education material could emphasize the benefits to future generation of 3Rs actions today.</p>	<p>Positive effects in changing current attitudes and behaviour to a more sustainable society which should leave future generations with a healthier environment and more resources available.</p>

TABLE F4.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Expanded Blue Box

Indicator: Potential Effects on Residents

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • Effects uncertain with regional recycling legislation • Landfill bans may lead to illegal dumping and burning. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Effects uncertain with regional recycling legislation • Landfill bans may lead to illegal dumping and burning.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop off points. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop off points.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities. 	<ul style="list-style-type: none"> • Proper management of community and apartment composters. 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma for neighbourhood • Public health concerns, particularly those of the elderly, the very young, those with allergies and nearby workers (Curtis, 1991). • Potential odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993) • Potential displacement of residents for the siting of a new facility. 	<ul style="list-style-type: none"> • Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems. MOEE regulations (MOEE, 1994) do not appear to mitigate all of the documented effects. • Composting sites should be located in areas of compatible land use and avoid residential areas where possible. A site selection process should be used to identify sites for new facilities. • State-of-the-art odour control features should be design requirements. Local residents should be on the management/monitoring committees (Lesnicki, 1993). • As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale. • Health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 1993). • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). 	<ul style="list-style-type: none"> • Potential displacement of residents for the siting of a new facility. • Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds, vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Traffic concerns • Visual effect of large bins in plazas • Centres may not be desirable in all areas due to stigma. 	<ul style="list-style-type: none"> • Locate Reuse Centres in areas of compatible land use. • Proper on-site management. 	<ul style="list-style-type: none"> • Minor potential traffic and visual effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre • Potential displacement of residents from the siting of a new facility. 	<ul style="list-style-type: none"> • Mitigation will need to encompass a site selection process and proper management. Avoid residential areas where possible. • Siting: MRF's should be sited in areas of compatible land use and avoid residential areas where possible. A site selection should be used to identify sites for new facilities. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage (Lesnicki, 1993). • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRFs, storage will be required elsewhere. • Local residents should be on a monitoring/management committee. 	<ul style="list-style-type: none"> • Potential displacement of residents from the siting of a new facility. Minor nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
<p>Residential Recycling Depots and Transfer Stations</p> <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre 	<ul style="list-style-type: none"> • Mitigation will need to encompass proper siting and management. • Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, car traffic, noise, visibility, litter, and possibility of excess storage. • Management: The Facility will need to be control nuisance effects, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required elsewhere. 	<ul style="list-style-type: none"> • Potential minor nuisance effects at some facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F4.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Expanded Blue Box

Indicator: Potential Effects on Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	Elderly and physically challenged may have difficult time setting out recyclable material for pick-up.	Provide maximum convenience possible.	Elderly and physically challenged may have difficult time setting out recyclable material for pick-up.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor nuisance effects associated with odour and physical strain on the elderly. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor nuisance effects associated with odour and physical strain on the elderly.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Potential occupational safety concerns with drivers and handlers of HHW. 	<ul style="list-style-type: none"> • HHW education for driver and handlers. 	<ul style="list-style-type: none"> • Minor potential occupational safety concerns with drivers and handlers of HHW.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Although the research (Curtis et al., 1991) indicates that properly managed composting produces a safe product, there are: • Potential health effects on allergy sufferers, people with respiratory ailments, people with immuno-deficiencies. • Potential employee health concerns (Taylor, 1993). 	<ul style="list-style-type: none"> • Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles (Curtis et al., 1991), appropriate operational procedures should be instituted to maximize this destruction. • Prudence dictates that employees should practise proper hygiene and wear protective clothing. • Health effects monitoring for employees and high-risk residents should be an operational condition. 	<ul style="list-style-type: none"> • Employees at compost facilities may be exposed to health and safety hazards. Should be minimized by education. Could be mitigated by proper design and control. • Potential for health effects (odours) on allergy sufferers, people with immuno-deficiencies, etc. Magnitude of effect may be minimized by proper siting considerations for new facilities and proper management.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Food contamination issue and liability concerns of donors (Wrigley, 1993). • Potential transfer of pests in reuse centres, exchange days, etc. 	<ul style="list-style-type: none"> • Train food distribution groups in potential contamination/spoilage. • Province to consider "Good Samaritan" Legislation to absolve donor of responsibility. • Cleaning and fumigation of materials; proper health precautions during cleaning and fumigation. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Potential employee health/safety concerns. 	<ul style="list-style-type: none"> Educate/train employees on health and safety hazards and precautions. 	<ul style="list-style-type: none"> Potential employee health/safety concerns. Should be minimized by mitigation.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> Drop-off depots for dry recyclables Depots located at transfer stations to provide recycling opportunities to self-haul generators Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling Drop-off depots (collecting all Expanded Blue Box materials) for rural households Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> Potential employee health/safety concerns. 	<ul style="list-style-type: none"> Educate/train employees on health and safety hazards and precautions. 	<ul style="list-style-type: none"> Potential employee health/safety concerns. Should be minimized by mitigation.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F4.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Expanded Blue Box

Indicator: Potential Effects on Community

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads. 	<ul style="list-style-type: none"> Landfill bans and recycling legislation may lead to illegal dumping and burning. 	<ul style="list-style-type: none"> Enforcements against illegal dumping. 	<ul style="list-style-type: none"> Landfill bans and recycling legislation may lead to illegal dumping and burning.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> • Potential minor traffic inconvenience in communities where materials are sorted at the truck. • Potential increase in community pride from participation. 	<ul style="list-style-type: none"> • Mitigation to include proper design of haulage system. 	<ul style="list-style-type: none"> • Potential minor traffic inconvenience in communities where materials are sorted at the truck. Effect reduced by mitigation. • Potential increase in community pride from participation.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents not served by curbside collections may not use depots and may dump illegally, e.g. couches, mattresses disposed in vacant lots. Could have a negative effect on community image. 	<ul style="list-style-type: none"> • Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them. • Assistance in organization of community garage sales, flea markets etc. • Enforcement against illegal dumping. 	<ul style="list-style-type: none"> • Minor negative stigma effect on community image from illegal dumping.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> Potential stigma effect in some communities. 	<ul style="list-style-type: none"> Mitigation same as "Potential Effects on Residents". 	<ul style="list-style-type: none"> Potential stigma effect in some communities.
Reuse Centres and Activities <ul style="list-style-type: none"> Municipal reuse centre Private reuse centre (e.g. Re-Uze, Scarborough) Non-profit reuse centre (WASTEWISE, Halton) Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) Food reuse organization (such as Second Harvest) Special goods exchange days 	<ul style="list-style-type: none"> Potential stigma effect in some communities. 	<ul style="list-style-type: none"> Location of the reuse centres in suitable land use area. 	<ul style="list-style-type: none"> Potential stigma effect in some communities.
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Potential stigma effect and disruption in some communities. Magnitude of effect dependant on site location and management of the facility. 	<ul style="list-style-type: none"> Mitigation same as "Potential Effects on Residents". 	<ul style="list-style-type: none"> Potential stigma effect and disruption in some communities. Magnitude of effect dependant on site location and management of the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	Potential stigma effect in some communities related to location of facilities.	Mitigation not required	Potential stigma effect in some communities related to location of facilities.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	Potential increase in community pride.	Mitigation not required	Potential increase in community pride.

TABLE F4.4
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Expanded Blue Box

Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> • Potential nuisance effects on community features and businesses from traffic and hauling. 	<ul style="list-style-type: none"> • Planning and co-ordination of haulage system to minimally disrupt local community features and businesses. 	<ul style="list-style-type: none"> • Potential nuisance effects on community features and businesses from traffic and hauling. Effect reduced by mitigation.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities. 	<ul style="list-style-type: none"> • Proper supervision of community composting and apartment facilities. 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma • Potential health concerns if compost is contaminated (Curtis, 1991). • Potential odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993). 	<ul style="list-style-type: none"> • Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems (Curtis, 1991). • MOEE regulations (MOEE, 1994) do not appear to mitigate all of the documented effects. • Composting sites should be located in areas of compatible land use. • State-of-the-art odour control features should be design requirements. Local residents and representatives from community features/businesses should be on the management/monitoring committees. <p>As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale.</p>	<ul style="list-style-type: none"> • Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Minor nuisance related effects on neighbouring features and businesses. • Visual blight/image effect. 	<ul style="list-style-type: none"> • Proper on-site management and housekeeping. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> - Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping - Potential displacement of community features (including cultural heritage resources) and businesses from siting of new facilities. 	<ul style="list-style-type: none"> - Mitigation will need to encompass a site selection process and proper management. Avoid community features (including cultural heritage resources) and businesses where possible. - Siting: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage (Lesnicki, 1993). - Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) - Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRFs, storage will be required elsewhere. - Local residents and representatives from community features/businesses should be on a monitoring/management committee. 	<ul style="list-style-type: none"> - Potential displacement of community features (including cultural heritage resources) and businesses from siting of new facilities. - Minor nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of features/businesses near the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
<p>Residential Recycling Depots and Transfer Stations</p> <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<p>Potential disruption from nuisance effects:</p> <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping 	<p>Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, car traffic, noise, litter, and possibility of excess storage.</p> <p>Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.)</p> <p>Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required elsewhere.</p>	<p>Minor nuisance effects on community features and businesses at some facilities.</p>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F4.5
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Expanded Blue Box

Indicator: Potential for Lifestyle Changes

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride (Spaccarelli et al., 1998-90). 	<ul style="list-style-type: none"> Ensure convenient location of drop-off point for apartment dwellers. Assistance in the development of 3Rs apartment committees, etc. Ensure the provision of information and educational services for new residents (Environics, 1990). This must be a continual effort to address turnover and increase in future densities (Hager, 1992; Lansana, 1992). Ensure convenience of system, weekly or bi-weekly. 	<ul style="list-style-type: none"> Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. • Encourages positive local action. • Inconvenience and annoyance for a minority of people, e.g., ill-fitting lids, insufficient volumes, lack of space, odours, pests, scavenging animals (Environics, 1990; McConnell Weaver, 1993). • Promotion of vermicomposting in apartments should increase awareness of role of apartment residents in 3Rs and should lead to greater support for and involvement in 3Rs. • Residents of apartment buildings may experience an increase in insects and rodents, odour and health concerns. • Minor inconveniences associated with community and apartment composting. 	<ul style="list-style-type: none"> • Address complaints (e.g., ill-fitting lids, insufficient volume) of users. • Provide kitchen containers, home delivery of composters, on-going subsidies (Environics, 1990; McLaren, 1990; Metropolitan Works Committee, 1992). • Target apartments with action • Promotion/Education programs and consultation program to maximize participation - modify composting program/components as required. • On-going education for proper use (Town of Markham). 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. • Supports other 3Rs activities. • Variety of lifestyle inconveniences with all types of composting. • Encourages positive local action.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents not served by curbside disposal may find the service inconvenient and difficult, resulting in illegal dumping. • Consumers may become much more concerned about size and durability of appliances and furniture. • Residents may become more aware of HHW and white goods management and change purchasing attitudes. 	<ul style="list-style-type: none"> • Promote special waste days and special depots for multi-family building collection. • Make collection drop-off point convenient for all households and/or continue toxic taxi. • Develop promotional/educational materials to emphasize alternatives to HHW for pest control, lawn & garden, cleaning agents, and paint and solvents. Encourage the use of 3Rs for HHW and the separation of HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992). 	<ul style="list-style-type: none"> • Residents may become more aware of HHW and white goods management and change purchasing attitudes.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • In some instances, has social welfare benefits. • May contribute to acceptance of using repaired/second hand items rather than buying new products (Quinte Regional Recycling, 1993). • Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness: and provide communal garage sales, flea markets, bazaars, etc. 	<ul style="list-style-type: none"> • Provide incentives for establishing reuse centres and for holding "garage" sales. 	<ul style="list-style-type: none"> • Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products. • In some instances, has social welfare benefits. • Increased appeal and household economic benefits with future demographic changes. May contribute to neighbourhood cohesiveness: through communal garage sales, flea markets, bazaars, etc.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Potentially encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change. • Could increase demand for packaging reduction (Environics, 1990). 	<ul style="list-style-type: none"> • Expand and refine promotion/education programs to target non-participating groups and to allow for changes in demographic make-up of GTA (Environics, 1990; Morgan-Fraser, 1993). • Promotional/Educational programs should be based on successful programs (e.g., Folz & Hazlett, 1990). For example, pamphlets and brochures (in utility bills, etc.) and community information meetings. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. The role of the schools could be important, particularly for new Canadians whose children are receiving the only English instruction in the family. Many School Boards have environmental education committees. 	<ul style="list-style-type: none"> • Potentially positive effect; encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change.

TABLE F4.6
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Expanded Blue Box

Indicator: Potential Effects on Employment

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
<ul style="list-style-type: none"> Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> Minor direct employment gains. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor direct employment gains.
Reuse Centres and Activities			
<ul style="list-style-type: none"> Municipal reuse centre Private reuse centre (e.g. Re-Uze, Scarborough) Non-profit reuse centre (WASTEWISE, Halton) Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) Food reuse organization (such as Second Harvest) Special goods exchange days 	<ul style="list-style-type: none"> Minor direct employment gains. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor direct employment gains.
MRFs			
<ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Minor direct employment gains. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor direct employment gains.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector. • Consumer education program to reduce waste generation, including videos, posters, calendars, pamphlets, advertisements, etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling. 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

TABLE F4.7
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Expanded Blue Box

Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation is not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Minor direct economic benefit 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefit
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

TABLE F4.8
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Expanded Blue Box

Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industries

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> • Landlords of multi-family buildings of greater than six units are required to provide space, facilities and staff time to accommodate recycling and may incur additional costs. 	<ul style="list-style-type: none"> • Province to consider additional costs for recycling in annual rent review. 	<ul style="list-style-type: none"> • Potential increase in costs for tenants and landlords.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Landlords may be required to provide space and equipment for composters and may experience increased costs associated with insect and rodent control and staff, etc. 	<ul style="list-style-type: none"> • Province to consider increase in costs associated with composting services in annual rent review applications. 	<ul style="list-style-type: none"> • Landlords may be required to provide space and equipment for composters and may experience increased costs associated with insect and rodent control and staff, etc.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products). • Because of the increasing inconvenience to consumers in disposing of old appliances/furniture, etc., they may start looking for, and there may be a growing market for, products which are smaller and more durable. 	<ul style="list-style-type: none"> • Retail stores could develop buy-back programs for large and bulky items. The consumer would then not be required to dispose of items. 	<ul style="list-style-type: none"> • In the long term institutions and commercial enterprises may develop programs to "buy back" used white goods.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	No effect	Mitigation not required	No effect
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> Drop-off depots for dry recyclables Depots located at transfer stations to provide recycling opportunities to self-haul generators Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling Drop-off depots (collecting all Expanded Blue Box materials) for rural households Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	No effect	Mitigation not required	No effect
Residential Promotion and Education <ul style="list-style-type: none"> 3Rs promotion and education program, focused on the residential sector Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. Promotion/education program on Expanded Blue Box program Promotion/education program on source reduction, pre-cycling, reuse and recycling 	No effect	Mitigation not required	No effect

TABLE F4.9
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Expanded Blue Box

Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
<p>Garbage Collection and Disposal</p> <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> Local residents and businesses may receive a disproportionate share of nuisance effects related to composting for all region residents. 	<ul style="list-style-type: none"> Mitigation same as "Potential Effects on Residents" 	<ul style="list-style-type: none"> Negative distribution effect on some local communities, population groups and industries, who receive a disproportionate share of effects from the facilities.
Reuse Centres and Activities <ul style="list-style-type: none"> Municipal reuse centre Private reuse centre (e.g. Re-Uze, Scarborough) Non-profit reuse centre (WASTEWISE, Halton) Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) Food reuse organization (such as Second Harvest) Special goods exchange days 	<ul style="list-style-type: none"> Positive effect for lower income groups as more low cost items available and adds potential market for these goods. Positive social welfare benefit 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Positive effect for lower income groups as more low cost items available and adds potential market for these goods. Positive social welfare benefit
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Potential negative distribution effects on some groups living near facility as they have a disproportionate share of the negative effects of the facility. 	<ul style="list-style-type: none"> Effective siting and management of facilities. Effective impact management and compensation program. 	<ul style="list-style-type: none"> Potential negative distribution effects on some groups living near facility as they have a disproportionate share of the negative effects of the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential minor negative distribution effects on some groups living near facility as they receive a disproportionate share of negative effects. 	<ul style="list-style-type: none"> • Effective siting and management of facilities. • Effective impact management and compensation program. 	<ul style="list-style-type: none"> • Potential minor negative distribution effects on some groups living near facility as they receive a disproportionate share of negative effects.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F4.10
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Expanded Blue Box

Indicator: Distribution of Lifestyle Effects

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Minor lifestyle inconvenience for those who must self-haul. 	<ul style="list-style-type: none"> Mitigation not required Minor lifestyle inconvenience for those who must self-haul.

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> • Minor lifestyle distributional effect between multi-family and low density development. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor lifestyle distributional effect between multi-family and low density development.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	No effect	Mitigation not required	No effect
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	No effect	Mitigation not required	No effect
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	No effect	Mitigation not required	No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F4.11
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Distribution of Social Costs and Benefits

System : Residential Expanded Blue Box
Indicator: Potential Future Generation Effects of System

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<p>Potential positive effect through wiser use of resources and conservation of the environment for recycling.</p>	<ul style="list-style-type: none"> • Continue to promote and educate on 3Rs (Hay, ND; Lesnicki, 1993; Morgan-Fraser, 1993; Watson, 1993). • The likely over-all benefit to future generations needs to be emphasized in promoting these programs. It needs to be stressed that the current generation is willing to make some sacrifices to ensure the future prosperity of their children/grandchildren. 	<p>Potential positive effect through wiser use of resources and conservation of the environment for future use/enjoyment.</p>
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting	<ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Moderately costly to start-up and establish but environmentally beneficial in the long run. Should support change in behaviour to reduction and reuse. 	<ul style="list-style-type: none"> • Promotion and education aimed at increasing future participation rates (Environics, 1990). • Positive potential effect of passing on a healthier environment through support for change in behaviour to reduction and reuse.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.).	<ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse and proper disposal. 	<ul style="list-style-type: none"> • Mitigation not required • Potential positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse and proper disposal.
Composting Facilities	<ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required • No effect

Component Category/Components	Potential Effects*	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Should encourage/support repair and reuse of white goods etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future. 	<ul style="list-style-type: none"> • Province to consider the removal of the Provincial Sales Tax or other provincial taxes for the sale of used goods. 	<ul style="list-style-type: none"> • Potential positive effect through the support for repair and reuse of goods, and subsequent reduction of resource use.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Costly to start-up and operate because of market development, but environmentally and possibly economically beneficial in the long run. • Current generation paying the cost for altering behaviour to more sustainable behaviour. Required support for recycling. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future generations with a healthier environment and more resources available.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Current generation behaviour paying cost for altering behaviour to a more sustainable society. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor positive effect as the current generation is paying the cost for changing to more sustainable behaviour which should leave future generations with a healthier environment and more resources available.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Should have positive effects in changing current attitudes and behaviours to a more sustainable society which should leave future generations with a healthier environment and more resources available. 	<ul style="list-style-type: none"> • Education material could emphasize the benefits to future generation of 3Rs actions today. 	<ul style="list-style-type: none"> • Potential positive effects in changing current attitudes and behaviour to a more sustainable society which should leave future generations with a healthier environment and more resources available.

TABLE F5.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Wet/Dry

Indicator: Potential Effects on Residents

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Self haul of garbage to landfills and transfer stations by residents • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • Effects uncertain with recycling legislation • Landfill bans may lead to illegal dumping and burning. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Effects uncertain with recycling legislation • Landfill bans may lead to illegal dumping and burning.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
<p>Residential Recycling and Collection</p> <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits. Residents will be encouraged to separate their waste into three separate bags 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop-off depots. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop-off depots.
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes. • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Potential for odour and vermin effects at apartments from 3 bin composting units and at composting facilities. 	<ul style="list-style-type: none"> • Proper management of community and apartment composters. 	<ul style="list-style-type: none"> • Potential for odour and vermin effects at apartments from 3 bin composting units and at composting facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation will include proper siting and management. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • Both types of composting facilities may have the following: • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma for neighbourhood • Health Concerns <p>Odour effects from composting facilities that receive mixed IC&I compost have been significant enough to have facilities closed down (RIS, 1993; J. Scott, 1993; Lannon, 1993). Odour effects from the wet stream of a Wet/Dry system in the province are relatively unknown. The Guelph Pilot Wet/Dry Project was of too small a scale to comparatively evaluate.</p> <p>Wet/Dry systems can be highly contaminated unless a significant percentage of the population very diligently source separates the waste (Glenn, 1993; Proctor and Redfern Ltd., 1993b). If there is very high contamination, it may lead to increased odour problems and the possibility of health concerns, such as increased levels of pathogens and bacteria (e.g. diapers tossed in with the wet stream).</p> 	<ul style="list-style-type: none"> • Composting sites will need to be located in areas of compatible land use and avoid residential areas where possible. A site selection process should be used to identify sites for new facilities. The siting considerations for these types of facilities should address: odour, heavy truck traffic, truck queuing, nuisance and litter. • State-of-the-art odour control features should be design requirements along with proper management of the material and initiatives to reduce the possibility of vectors and vermin. Local residents should be on the management/monitoring committees. As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale with a wet/dry system. 	<ul style="list-style-type: none"> • Potential nuisance effects • Potential displacement of residents from the location of a new facility • Potential for odour effects health and safety concerns and minor nuisance effects such as traffic, litter, visual, birds, vermin and noise. These effects may be more extensive in wet/dry combined composting than in leaf and yard waste composting.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992). However, health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 1993). • Potential displacement of residents from the location of a new facility. 		
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Traffic concerns • Visual effect of large bins in plazas • Centres may not be desirable in all areas due to stigma 	<ul style="list-style-type: none"> • Locate Reuse Centres in areas of compatible land use. • Proper on-site management. 	<ul style="list-style-type: none"> • Minor potential effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre - odour (due to possibility of contamination of the dry stream) • Potential displacement of residents from the siting of a new facility. 	<ul style="list-style-type: none"> • Mitigation will need to encompass a site selection process and proper management. • Siting: MRF's should be sited in areas of compatible land use and to avoid or reduce displacement and disruption. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, odour, and the possibility of excess storage (Lesnicki, 1993). • Management: The facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pest, and excess materials. Many of these effects could potentially be controlled by proper site design and planning (berms, fences, etc.). • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. If these materials are not be kept at the MRFs, storage will be required elsewhere. • Local residents should be on a monitoring/management committee 	<ul style="list-style-type: none"> • Potential displacement of residents from the siting of a new facility • Potential for odour effects, health and safety concerns, and minor nuisance effects. These effects may be more extensive in a wet/dry system than with other facilities, because of potential for contamination.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables, household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre - odour (due to possibility of contamination of the dry stream) • Potential displacement of residents from the siting of a new facility 	<ul style="list-style-type: none"> • Mitigation will need to encompass proper siting and management. Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, car traffic, noise, litter, odour and the possibility of excess storage. • Facility management will need to control nuisance effects and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.). • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required elsewhere. • Odour effects can best be controlled by ensuring a low contamination rate. 	<ul style="list-style-type: none"> • Potential minor nuisance effects at some facilities

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F5.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Wet/Dry

Indicator: Potential Effects on special/sensitive groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Self haul of garbage to landfills and transfer stations by residents • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • Wet/Dry collection may seriously affect elderly and disabled populations (mobility impaired) who must move 90 gallon carts in all seasons. Winter may be very problematic due to snow on curbs. They also may have problems cleaning the carts, and with nuisance effects (odour, vermin, etc.) (City of Guelph, 1991). 	<ul style="list-style-type: none"> • Mitigation may need to include alternative collection units for these groups 	<ul style="list-style-type: none"> • Wet/Dry System may be very difficult for elderly and disabled groups. • There may be significant nuisance effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<p>Wet/Dry collection may seriously effect elderly and disabled populations (mobility impaired) who must move 90 gallon carts in all seasons. Winter may be very problematic due to snow on curbs. They also may have problems cleaning the carts, and with nuisance effects (odour, vermin, etc.) (City of Guelph, 1991).</p>	<p>Mitigation may need to include alternative collection units for these groups</p>	<p>Wet/Dry System may be very difficult for elderly and disabled groups and may result in nuisance effects for them.</p>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Wet/Dry collection for leaf and yard waste may seriously effect elderly and disabled populations (mobility impaired) who must move 90 gallon carts in all seasons. • Winter may be very problematic due to snow on curbs. They also may have problems cleaning the carts, and with nuisance effects (odour, vermin, etc.) (City of Guelph, 1991). 	<ul style="list-style-type: none"> • Mitigation may need to include alternative collection units for these groups 	<ul style="list-style-type: none"> • Effect noted in Recycling and Collection.
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor nuisance effects associated with odour and physical strain on the elderly. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor nuisance effects associated with odour and physical strain on the elderly.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	Potential occupational safety concerns with drivers and handlers of HHW	HHW education for drivers and handlers	Minor occupational safety concerns with drivers and handlers of HHW

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • Although the research (Curtis et al., 1991) indicates that properly managed composting produces a safe product, there are: Potential health effects on allergy sufferers, people with respiratory ailments, people with immuno-deficiencies; potential employee health concerns (Taylor, 1993). • Potential negative health effects may be heightened because of the potential for contamination of the "Wet" stream by other materials. Household hazardous wastes and sharps (razors, needles, etc.) may be significant concerns (Taylor, 1993). The actual effects are relatively unknown due to limited North American experience with wet/dry systems. 	<ul style="list-style-type: none"> • Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles (Curtis et al., 1991), appropriate operational procedures should be instituted to maximize this destruction. • Prudence dictates that employees should practise proper hygiene and wear protective clothing • Health effects monitoring for employees and high-risk residents should be an operational condition • Periodic monitoring of the piles to determine type and extent of contamination 	<ul style="list-style-type: none"> • Employees at MRFs and in particular compost facilities may be subjected to a variety of health and safety hazards such as HHW and sharps in "wet" stream. Hazards should be minimized by consultation and education and mitigated by proper design and control. • Potential for health effects (odours) for allergy sufferers, people with immuno-deficiencies, etc. from composting facilities.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Food contamination issue and liability concerns of donors (Wrigley, 1993). • Potential transfer of pests through reuse centres, exchange days, etc. 	<ul style="list-style-type: none"> • Train food distribution groups in potential contamination/spoilage. • Province should consider "Good Samaritan" legislation to absolve donor of responsibility. • Cleaning and fumigation of materials, proper health precautions during cleaning and fumigation. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential employee health/safety concerns due to contamination of the "dry" stream with hazardous materials (sharps, HHW, etc.) (Taylor, 1993). 	<ul style="list-style-type: none"> • Educate/train employees on health and safety hazards and precautions. • Achieve low contamination rates of streams. 	<ul style="list-style-type: none"> • Magnitude of health and safety effects in employees will be dependent on the contamination level of the "dry" stream and appropriate clothing and management for the employees.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential employee health/safety concerns due to contamination of the "dry" stream with hazardous materials (sharps, HHW, etc.) (Taylor, 1993). 	<ul style="list-style-type: none"> • Educate/train employees on health and safety hazards and precautions. • Achieve low contamination rates of streams. 	<ul style="list-style-type: none"> • Magnitude of health and safety effects will be dependent on the contamination level of the "dry" stream and appropriate clothing and management for the employees

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F5.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Wet/Dry

Indicator: Potential Effects on Communities

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Self haul of garbage to landfills and transfer stations by residents • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • Traffic inconveniences are possible due to the wet/dry collection system, and increase in materials being transported. • Landfill bans and regional recycling legislation may lead to illegal dumping and burning. 	<ul style="list-style-type: none"> • Enforcements against illegal dumping 	<ul style="list-style-type: none"> • Traffic inconveniences are possible due to the wet/dry collection system, and increase in materials being transported. • Landfill bans and regional recycling legislation may lead to illegal dumping and burning.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<ul style="list-style-type: none"> • Potential traffic inconvenience in communities when materials are deposited in the truck. • Potential for increase in community pride. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential traffic inconvenience in communities when materials are deposited in the truck. • Potential for increase in community pride.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents not served by curbside collections may not use depots and may dump illegally, e.g. couches and mattresses disposed in vacant lots. Could have a negative effect on community image. 	<ul style="list-style-type: none"> • Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them. • Assistance in organization of community garage sales, flea markets, etc. • Enforcement against illegal dumping. 	<ul style="list-style-type: none"> • Minor negative stigma effect on community image from illegal dumping.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • Potential stigma effect in some communities 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents". 	<ul style="list-style-type: none"> • Potential stigma effect in some communities. Magnitude of effect dependent on site location and management of the facility.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Potential stigma effect in some communities 	<ul style="list-style-type: none"> • Location of the reuse centres in suitable areas of compatible land use. • Proper on-site management and housekeeping. • Provide incentives for establishing reuse centres and for holding garage sales. 	<ul style="list-style-type: none"> • Potential stigma effect in some communities
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential stigma and disruption effect in some communities. 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents". 	<ul style="list-style-type: none"> • Potential stigma effect in some communities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables, household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential stigma effect in some communities related to location of facilities. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential stigma effect in some communities related to location of facilities.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • Potential increase in community pride. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential increase in community pride.

TABLE F5.4
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Wet/Dry

Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Self haul of garbage to landfills and transfer stations by residents Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<ul style="list-style-type: none"> • Potential nuisance effects on community features and businesses from traffic and hauling. 	<ul style="list-style-type: none"> • Planning and co-ordination of haulage system to minimally disrupt local community features and businesses. 	<ul style="list-style-type: none"> • Potential nuisance effects on community features and businesses from traffic and hauling.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities. 	<ul style="list-style-type: none"> • Proper management of community and apartment composting. 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma for neighbourhood • Potential health concerns. • Odour effects from composting facilities that receive mixed IC&I compost have been significant enough to have facilities closed down (RIS, 1993; J. Scott, 1993; Lannon, 1993). Odour effects from the wet stream of a Wet/Dry system in the province are relatively unknown. The Guelph Pilot Wet/Dry Project was of too small a scale to comparatively evaluate. 	<ul style="list-style-type: none"> • Composting sites will need to be located in areas of compatible land use. The siting considerations for these types of facilities should address: odour, heavy truck traffic, truck queuing, nuisance and litter. • State-of-the-art odour control features should be design requirements along with proper management of the material and initiatives to reduce the possibility of vectors and vermin. People at community features and businesses should be on the management/monitoring committees. As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale with a wet/dry system. 	<ul style="list-style-type: none"> • Potential nuisance effects. • Potential displacement of community features (including cultural heritage resources) and business from the location of a new facility. • Potential for odour effects health and safety concerns and minor nuisance effects such as traffic, litter, visual, birds, vermin and noise. These effects may be more extensive in wet/dry than in leaf and yard waste composting.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (cont'd)	<ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste <p>Wet/Dry systems can be highly contaminated unless a significant percentage of the population, very diligently source separates the waste (Glenn, 1993; Proctor and Redfern Ltd., 1993b). If there is very high contamination, it may lead to increased odour problems and the possibility of health concerns such as increased levels of pathogens and bacteria (e.g. diapers tossed in with the wet stream).</p> <p>Potential displacement of community features (including cultural heritage resources) and businesses from the siting of a new facility.</p>	<p>Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992). However, health effects could be monitored for workers and the neighbouring community features and businesses over an initial period at the required facility (Taylor, 1993).</p>	
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Minor nuisance related effects on neighbouring features and businesses • Visual blight/image effect. 	<ul style="list-style-type: none"> • Proper on-site management and housekeeping. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre - odour (due to possibility of contamination of the dry stream) • Potential displacement of community features (including cultural heritage resources) and businesses from the siting of a new facility 	<ul style="list-style-type: none"> • Mitigation will need to encompass a proper site selection process and proper management • Siting: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, odour, and the possibility of excess storage (Lesnicki, 1993). • Management: The facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pest, and excess materials. Many of these effects could potentially be controlled by proper site design and planning (berms, fences, etc.). • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRFs, storage will be required elsewhere. • People at Community features and businesses should be on a monitoring/management committee 	<ul style="list-style-type: none"> • Potential displacement of community features (including cultural heritage resources) and businesses from the siting of a new facility • Potential for odour effects, health and safety concerns, and minor nuisance effects. These effects may be more extensive in a wet/dry system than with other facilities, because of potential for contamination.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance related effects on nearby features and businesses; <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre • Potential displacement of community features (including cultural heritage resources) and businesses from location of new facilities. 	<ul style="list-style-type: none"> • Mitigation will need to encompass proper siting and management. • Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, car traffic, noise litter and possibility of excess storage. • Facility management will need to control nuisance effects and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required elsewhere. • Odour effects can be best controlled by having a low contamination rate. 	<ul style="list-style-type: none"> • Minor nuisance effects at some facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F5.5
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Wet/Dry

Indicator: Potential for Lifestyle Change

Component Category/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Self haul of garbage to landfills and transfer stations by residents • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • Potential for a variety of minor lifestyle effects associated with moving and maintaining the 90 gallon carts. 	<ul style="list-style-type: none"> • Optional smaller cans may be needed for the elderly and for those with a lack of space. 	<ul style="list-style-type: none"> • Potential for a variety of minor lifestyle inconveniences associated with carts. • Effects may be greater in high density areas.

Component Category/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<ul style="list-style-type: none"> • Potential for a variety of minor lifestyle effects associated with the Wet/Dry bin system. Nuisance effects could include: odour, waste sticking to bins, difficulties associated with cleaning the bins, insects, moving the bins in winter, snowbanks, lack of space for 90 gallon bins, etc. (City of Guelph, 1991). • The change from a traditional Blue Box system to Wet/Dry requires residents to significantly change their sorting and recycling behaviour. • The Guelph experience tends to demonstrate a positive social and lifestyle effect, people are willing to do and learn more and it has become a source of personal and community pride. 	<ul style="list-style-type: none"> • Ensure convenience of system, weekly or bi-weekly. • Ensure convenient drop-off locations for apartment dwellers and rural households. • Assistance in the development of 3Rs apartment committees, etc. • Ensure the provision of information and educational services for new residents (Environics, 1990). This must be a continual effort to address turnover and increase in densities (Hager, 1992; Lansana, 1992). 	<ul style="list-style-type: none"> • Probably a positive social and lifestyle effect, people willing to do and learn more. • Variety of minor lifestyle inconveniences associated with bins (as with garbage collection). The bins may be too large for some residents to manage during the winter.

Component Category/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. • Encourages positive local action. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. • Encourages positive local action and increases awareness in community. • Inconvenience and annoyance for a minority of people: e.g., ill-fitting lids, insufficient volumes, pests, lack of space, odours, scavenging animals (Environics, 1990; McConnell Weaver, 1993). • Program may have substantial potential to increase waste diversion (MacLaren, 1990; Environics, 1990). • Minor inconveniences associated with community composting. 	<ul style="list-style-type: none"> • Address complaints (e.g., ill-fitting lids, insufficient volume) of users. • Provide kitchen containers, home delivery of composters, on-going subsidies (Environics 1990; MacLaren, 1990; Metropolitan Works Committee, 1992). • Ongoing education for proper use (Town of Markham, 1993). 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. • Supports other 3Rs activities • Variety of lifestyle inconveniences with all types of composting.

Component Category/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • White goods disposal may be increasingly inconvenient and difficult in areas where curbside service is not provided, resulting in illegal dumping. • Consumers may become much more concerned about size and durability of appliances and furniture. • Residents may become more aware of HHW and white goods management and change purchasing behaviour. 	<ul style="list-style-type: none"> • Promote special waste days and special depots for multi-family building collection. • Make collection drop-off point convenient for all households and/or continue toxic taxi. • Develop promotional/educational materials to emphasize alternatives to HHW for pest control, lawn & garden, cleaning agents, and paint and solvents. Encourage the use of 3Rs for HHW and the separation of HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992). 	<ul style="list-style-type: none"> • Residents may become more aware of HHW and white goods management and change purchasing behaviour.
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • May contribute to acceptance of using repaired/second hand items rather than buying new products (Quinte Regional Recycling, 1993). • Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness and encourage communal garage sales, flea markets, bazaars, etc. 	<ul style="list-style-type: none"> • Provide incentives for establishing reuse centres and for holding "garage" sales. • Provide assistance in promoting special goods exchange days 	<ul style="list-style-type: none"> • Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products. • Increased appeal and household economic benefits with future demographic changes. May contribute to neighbourhood cohesiveness, through communal garage sales, flea markets, bazaars, etc.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	Promotion of the system may or may not encourage 3Rs thinking and a change in lifestyle.	<ul style="list-style-type: none"> • Evaluate Guelph's Wet/Dry Education and Promotion Programs to identify key educational elements. • One of the criticisms of the Wet/Dry System, is that it does not force people to actively think about recycling, reusing or reducing their waste. • If positive effects are to be achieved, extensive efforts into developing wet/dry promotional/educational programs will be needed. • Support schools with information, financial assistance and educational materials for 3Rs education. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. 	<ul style="list-style-type: none"> • Potential positive effect: encourages people to participate and understand the system.

TABLE F5.6
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Wet/Dry

Indicator: Potential Effects on Employment

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Self haul of garbage to landfills and transfer stations by residents • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor short-term increase in construction sector employment. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor short-term increase in construction sector employment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor short-term increase in construction sector employment. • Increased reuse activities may create concerns about participant liability and the risk of distribution of spoiled food. 	<ul style="list-style-type: none"> • Training of food distribution group in matters of contamination and spoilage. • Implement "Good Samaritan" legislation that absolves donors of responsibility. 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor short-term increase in construction sector employment.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor short-term increase in construction sector employment. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor short-term increase in construction sector employment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor short-term increase in construction sector employment. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor short term increase in construction jobs.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor short term employment gains.

TABLE F5.7
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Wet/Dry

Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Self haul of garbage to landfills and transfer stations by rural residents • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> Minor direct economic benefits. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor direct economic benefits.
Reuse Centres and Activities <ul style="list-style-type: none"> Municipal reuse centre Private reuse centre (e.g. Re-Uze, Scarborough). Non-profit reuse centre (WASTEWISE, Halton). Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). Food reuse organization (such as Second Harvest). Special goods exchange days 	<ul style="list-style-type: none"> Minor direct economic benefits. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor direct economic benefits.
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Minor direct economic benefits. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

TABLE F5.8
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Wet/Dry

Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industry

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Self haul of garbage to landfills and transfer stations by rural residents • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • All landlords may be required to provide space, facilities, and staff time to accommodate the Wet/Dry System. They may incur additional costs. • There may be a variety of nuisance effects. 	<ul style="list-style-type: none"> • Province to consider amending annual rent review applications to reflect potentially increased costs to landlords. 	<ul style="list-style-type: none"> • Potential increased costs for landlords and tenants. There may be a variety of nuisance effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
<p>Residential Recycling and Collection</p> <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<ul style="list-style-type: none"> • All landlords of multi-family buildings of greater than six units are required to provide space, facilities, and staff time to accommodate the Wet/Dry System. They may also incur additional costs. There may be a variety of nuisance effects. 	<ul style="list-style-type: none"> • Landlords to include additional costs for recycling in annual rent review application. 	<ul style="list-style-type: none"> • Potential increased costs for tenants and landlords. There may be a variety of nuisance effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Landlords may be required to provide space and equipment for composters and may experience increased costs associated with insect and rodent control, staff, etc. 	<ul style="list-style-type: none"> • Province to consider additional costs for recycling in annual rent review application. 	<ul style="list-style-type: none"> • Potential increase in costs for tenants and landlords

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products). • Consumers inconvenienced by a lack of curbside disposal for white goods may contribute to a growing market for products which are smaller and more durable. 	<ul style="list-style-type: none"> • Retail stores could develop buy-back programs for large and bulky items. The consumer would then not be required to dispose of items. 	<ul style="list-style-type: none"> • In the long-term institutions and commercial enterprises may develop programs to "buy back" used white goods.
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Local businesses may be concerned about liability involved in increased amounts of used donated items. 	<ul style="list-style-type: none"> • Implement "Good Samaritan" legislation that absolves donors of responsibility. 	<ul style="list-style-type: none"> • No effect
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F5.9
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Wet/Dry

Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Self haul of garbage to landfills and transfer stations by rural residents • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • Local residents and businesses may receive disproportionate share of nuisance effects related to composting for all region residents. 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents". 	<ul style="list-style-type: none"> • Negative distribution effects on local communities, population groups, and industries who receive a disproportionate share of related nuisance effects of facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Positive effect for lower income groups as more low cost items available and adds potential market for these goods. • Positive social welfare benefit. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive effect for lower income groups as more low cost items available and adds potential market for these goods. • Positive social welfare benefit.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near facility, as they have a disproportionate share of the negative effects of the facility. 	<ul style="list-style-type: none"> • Effective siting and management of facility. • Effective impact management and compensation program. 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near facility who receive a disproportionate share of nuisance effects.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential minor negative distribution effects on some groups living near facility as they receive a disproportionate share of negative effects. 	<ul style="list-style-type: none"> • Effective siting and management of facility. • Effective impact management and compensation program. 	<ul style="list-style-type: none"> • Potential minor negative distribution effects on some groups living near facility as they receive a disproportionate share of negative effects.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F5.10
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Wet/Dry

Indicator: Distribution of Lifestyle Effects

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Self haul of garbage to landfills and transfer stations by rural residents • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • Potential for minor difference in lifestyle effects between high density and low density developments. • Minor lifestyle inconvenience for those who must self-haul. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential for minor difference in lifestyle effects between high density and low density developments. • Minor lifestyle inconvenience for those who must self-haul.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<ul style="list-style-type: none"> • Minor lifestyle distributional effect between multi-family and low density developments. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor lifestyle distributional effect between multi-family and low density developments.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect
Reuse Centres and Activities <ul style="list-style-type: none"> Municipal reuse centre Private reuse centre (e.g. Re-Uze, Scarborough). Non-profit reuse centre (WASTEWISE, Halton). Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). Food reuse organization (such as Second Harvest). Special goods exchange days 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F5.11
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Wet/Dry

Indicator: Potential Future Generational Effects of System

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Self haul of garbage to landfills and transfer stations by rural residents Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<ul style="list-style-type: none"> Positive effect through wiser use of resources and conservation of the environment for future use/enjoyment. 	<ul style="list-style-type: none"> Continue to promote and educate on 3Rs (Hay, ND; Lesnicki, 1993; Morgan-Fraser, 1993; Watson, 1993). The likely overall benefit to future generations needs to be emphasized in promoting these programs. It needs to be stressed that an entire generation is willing to make some sacrifices to ensure the future prosperity of their children/grandchildren. 	<ul style="list-style-type: none"> Potential positive effect through wiser use of resources and conservation of the environment for future use/enjoyment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Moderately costly to start-up and establish but environmentally beneficial to future generations due to a support for a change in behaviour to reduction and reuse. 	<ul style="list-style-type: none"> • Promotion and education aimed at increasing future participation rate (Environics, 1990). 	<ul style="list-style-type: none"> • Positive potential effect of passing on a healthier environment with resources more available, through support for change in behaviour to reduction and reuse.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> Positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse and proper disposal. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Potential positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse and proper disposal.
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Should encourage/support repair and reuse of white goods, etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future. 	<ul style="list-style-type: none"> • Province to consider removing Provincial Sales Tax or other provincial taxes for the sale of used goods. 	<ul style="list-style-type: none"> • Potential positive effect through the support for repair and reuse of goods and subsequent reduction of resource use.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Costly to start-up and operate because of market development, but environmentally and possibly economically beneficial in the long run. • Current generation paying the cost for altering behaviour to more sustainable behaviour. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future with a healthier environment and more resources available.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Current generation paying the cost for altering behaviour to a more sustainable society. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future generations with a healthier environment and more resources available.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • Should have positive effects in changing current attitudes and behaviours to a more sustainable society which should leave future generations with cleaner environment and more resources available. 	<ul style="list-style-type: none"> • Education material could emphasize the benefits to future generation of 3Rs actions today. 	<ul style="list-style-type: none"> • Potential positive effects in changing current attitudes and behaviour to a more sustainable society, which should leave future with cleaner environment and more resources available.

TABLE F6.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Mixed Waste Processing

Indicator: Potential Effects on Residents

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by rural residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Effects uncertain with regional recycling legislation. Landfill bans may lead to illegal dumping and burning. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Landfill bans may lead to illegal dumping and burning.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop-off depots. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor nuisance effects from drop-off depots.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Potential for odour and vermin effects at community and apartment composting facilities. 	<ul style="list-style-type: none"> • Proper management of community and apartment composters. 	<ul style="list-style-type: none"> • Potential for odour and vermin effects at community and apartment composting facilities.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed-waste processing and composting facility 	<ul style="list-style-type: none"> • Both types of facilities may have the following effects: Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma for neighbourhood • Public health concerns. Potential exposure of residents to aerospores and human pathogens if compost contaminated (Curtis, 1991). These effects are more likely with mixed waste than with regular composting. • Potential odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993). These effects may be much more extensive with a mixed waste system. • Potential displacement of residents for the location of a new facility. 	<ul style="list-style-type: none"> • Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems. • MOEE regulations (MOEE, 1994) do not appear to mitigate all of the documented effects. • Composting sites should be located in areas of compatible land use and avoid residential areas where possible. A site selection process should be used to identify sites for new facilities. The siting considerations for these types of facilities should address: odour, heavy truck traffic, truck queuing nuisance and litter. State-of-the-art odour control features should be design requirements. Local residents should be on the management/monitoring committees (Lesnicki, 1993). • As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale. • Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992). However, health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 	<ul style="list-style-type: none"> • Potential displacement of residents for the location of a new facility. • Potential for significant odour effect from Mixed Waste Processing and Composting facility. Virtually all plants in the U.S. have significant odour problems that have led to their permanent or temporary closure. Only 2 of 127 centralized facilities in Canada accept mixed and municipal solid waste for processing into compost (Composting Council of Canada, 1993). May be difficult to site. Mitigation measures may have only a limited effect. • Potential odour and health concerns an minor nuisance effects such as traffic, litter, birds, vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management of the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (continued)		<ul style="list-style-type: none"> • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). 	
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Traffic concerns • Visual effect of large bins in plazas • Centres may not be desirable in all areas due to stigma. 	<ul style="list-style-type: none"> • Locate Reuse Centres in areas of compatible land use. • Proper on-site management. 	<ul style="list-style-type: none"> • Minor potential effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre • Potential displacement of residents from the siting of a new facility. 	<ul style="list-style-type: none"> • Mitigation will need to encompass proper a site selection process and proper management. Avoid residential areas where possible. • Siting: MRF's should be sited in areas of compatible land use and to avoid or reduce displacement and disruption. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage (Lesnicki, 1993). • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRFs, storage will be required elsewhere. • Local residents should be on a monitoring/management committee. 	<ul style="list-style-type: none"> • Potential displacement of residents from the siting of a new facility. • Nuisance effects from traffic litter and noise. Magnitude of effects may be minimized by proper siting considerations for new facilities and proper management.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre • Potential displacement for new facilities 	<ul style="list-style-type: none"> • Mitigation will need to encompass proper siting and management. • Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, car traffic, noise, visibility, litter, and possibility of excess storage. • Management: The Facility will need to control nuisance effects and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required elsewhere. 	<ul style="list-style-type: none"> • Potential minor nuisance effects at some facilities

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F6.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Mixed Waste Processing

Indicator: Potential Effects on Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Elderly/physically challenged may have difficulty carrying/lifting blue box. 	<ul style="list-style-type: none"> • Provide maximum convenience potential. 	<ul style="list-style-type: none"> • Greater inconvenience for elderly and physically challenged.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor nuisance effects associated with odour and physical strain on elderly. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor nuisance effects associated with odour and physical strain on elderly.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Potential occupational safety concerns with drivers and handlers of HHW. 	<ul style="list-style-type: none"> • HHW education for driver/handlers 	<ul style="list-style-type: none"> • Minor occupational safety concerns with drivers and handlers of HHW.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • Although the research (Curtis et al., 1991) indicates that properly managed composting produces a safe product, there are: • Potential important health effects on allergy sufferers, people with respiratory ailments, people with immuno-deficiencies because of mixed waste processing facility. • Potential employee health concerns (Taylor, 1993; Curtis, 1991) associated with mixed waste processing. 	<ul style="list-style-type: none"> • Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles (Curtis et al., 1991), appropriate operational procedures should be instituted to maximize this destruction. • Prudence dictates that employees should practise proper hygiene and wear protective clothing. • Health effects monitoring for employees and high-risk residents should be an operational condition. 	<ul style="list-style-type: none"> • Potential for significant nuisance and potential health effects from mixed waste processing and composting facility on allergy sufferers, people with immuno deficiencies, etc. • Employees may be exposed to health and safety hazards. Should be minimized by education. Could be mitigated by proper design and control.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Food contamination issue and liability concerns of donors (Wrigley, 1993). • Potential transfer of pests through reuse centres, exchange days 	<ul style="list-style-type: none"> • Train food distribution groups in potential contamination/spoilage. • Province should consider "Good Samaritan" Legislation to absolve donor of responsibility. • Cleaning and fumigation of materials; proper health precautions during cleaning and fumigation. • Proper on-site management and housekeeping. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential employee health/safety concerns 	<ul style="list-style-type: none"> • Educate/train employees on health and safety hazards and precautions. 	<ul style="list-style-type: none"> • Potential employee health/safety concerns. Should be minimized by mitigation.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential employee health/safety concerns 	<ul style="list-style-type: none"> • Educate/train employees on health and safety hazards and precautions. 	<ul style="list-style-type: none"> • Potential employee health/safety concerns. Should be minimized by mitigation.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F6.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Mixed Waste Processing

Indicator: Potential Effects on Community

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by rural residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Landfill bans and regional recycling legislation may lead to illegal dumping and burning. 	<ul style="list-style-type: none"> Enforcement against illegal dumping 	<ul style="list-style-type: none"> Landfill bans and regional recycling legislation may lead to illegal dumping and burning.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Minor traffic inconvenience in communities where materials are sorted at the truck • Potential increase in community pride 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor traffic inconvenience in communities where materials are sorted at the truck • Potential increase in community pride
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents not served by curbside collection could dump illegally, e.g. couches and mattresses disposed of in vacant lots. Could have a negative effect on community image. 	<ul style="list-style-type: none"> • Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them. • Assistance in organization of community garage sales, flea markets etc. • Enforcement against illegal dumping 	<ul style="list-style-type: none"> • Minor negative community stigma effect on community image from illegal dumping.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • Potential significant stigma effect in some communities due to the presence of a mixed solid waste processing facility. 	<ul style="list-style-type: none"> • State-of-the-art odour control should be an operational condition 	<ul style="list-style-type: none"> • Potential significant stigma effect in some communities due to the presence of a mixed solid waste processing facility.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Potential stigma effect in some communities 	<ul style="list-style-type: none"> • Location of the reuse centres in suitable land use area. • Provide incentives for establishing reuse centres and for holding garage sales. • Proper on-site management and housekeeping. 	<ul style="list-style-type: none"> • No effect
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential stigma and disruption effect in some communities. 	<ul style="list-style-type: none"> • Stigma and disruption addressed in siting and management of facilities. 	<ul style="list-style-type: none"> • Potential stigma effect and disruption in some communities. Magnitude of effect dependant on site location and management of the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Potential increase in community pride 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential increase in community pride

TABLE F6.4
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential Local Community Impacts

System : Residential Mixed Waste Processing

Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by rural residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Potential nuisance effects on community features and businesses from traffic and hauling. 	<ul style="list-style-type: none"> • Planning and co-ordination of haulage system to minimally disrupt local community features and businesses. 	<ul style="list-style-type: none"> • Potential minor nuisance effects on community features and businesses from traffic and hauling.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities. 	<ul style="list-style-type: none"> • Proper management of community and apartment composting facilities. 	<ul style="list-style-type: none"> • Potential for odour and vermin problems at community and apartment composting facilities.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • Both types of facilities will have: • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - odour - scavenging animals and birds - visual - illegal dumping - traffic, truck queuing - noise - child safety - property devaluation - stigma for neighbourhood • Potential public health concerns. Potential exposure of residents to aerospores and human pathogens if compost contaminated (Curtis, 1991). These effects are more likely with mixed waste than with regular composting. • Potential odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993). These effects may be much more extensive with a mixed waste system. • Potential displacement of community features (including cultural heritage resources) and businesses from siting new facility. 	<ul style="list-style-type: none"> • Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems. MOEE proposed regulations (MOEE, 1993) do not appear to mitigate all of the documented effects. • Composting sites should be located in areas of compatible land use. The siting considerations for these types of facilities should address: odour, heavy truck traffic, truck queuing, noise and litter, and cultural heritage resources. • State-of-the-art odour control features should be design requirements. People who work at local businesses should be on the management/monitoring committees (Lesnicki, 1993). 	<ul style="list-style-type: none"> • Potential for significant odour effect from Mixed Waste Processing and Composting facility. Virtually all plants in the U.S. have significant odour problems that have led to their permanent or temporary closure. Only 2 of 137 centralized facilities in Canada accept mixed and municipal solid waste for processing into compost (Composting Council of Canada, 1993). May be difficult to site. Mitigation measures may have only a limited effect. • Potential displacement of community features and businesses due to new facility location. • Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds, vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management of the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Minor nuisance related effects on neighbouring features and businesses • Visual blight/image effect 	<ul style="list-style-type: none"> • Proper on-site management and housekeeping. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping at centre • Potential displacement of community features (including cultural heritage resources) and businesses from siting of a new facility. 	<ul style="list-style-type: none"> • Mitigation will need to encompass a site selection process and proper management. Avoid community features (including cultural heritage resources) and businesses where possible. • Siting: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter and the possibility of excess storage. • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.). • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRFs, storage will be required elsewhere. • People who work in local business should be on a monitoring/ management committee. Establish a consultant program with business and feature operations near the facility. If required establish a liaison committee. • Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). 	<ul style="list-style-type: none"> • Potential nuisance effects from traffic, litter and noise. Magnitude of effects may be minimized by proper siting considerations for new facilities and proper management. • Potential displacement of community features and businesses from the siting of a new facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential disruption from potential nuisance effects: <ul style="list-style-type: none"> - litter - visual - traffic, truck queuing - noise - child safety - property devaluation - illegal dumping • Potential displacement of community features and businesses from siting of a new facility. 	<ul style="list-style-type: none"> • Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, car traffic, noise, litter, and possibility of excess storage. • Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) • Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRFs, storage will be required elsewhere. 	<p>Minor nuisance effects on community features and businesses from some facilities.</p>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F6.5
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Mixed Waste Processing
Indicator: Potential for Lifestyle Changes

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by rural residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride (Spacarelli et al., 1989-90). However, the mixed waste processing component may have a negative effect because some people may not perceive a need for source separation. It may lead to counter-productive attitudes. 	<ul style="list-style-type: none"> Ensure convenient location of drop-off point for apartment dwellers. Provide seminars, technical assistance and financial assistance to landlord organizations. Develop programs and support voluntary organizations who assist in 3Rs initiatives. Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. Increase funding of 3Rs education at local level. Ensure the provision of information and educational services for new residents (Environics, 1990). This must be a continual effort to address turnover and increase in future densities (Hagar, 1992; Lansana, 1992). Ensure convenience of system, weekly or bi-weekly. 	<ul style="list-style-type: none"> Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. However, the mixed waste processing component may have a negative effect because some people may not perceive a need to source separate. It may lead to counter-productive 3Rs attitudes.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. • Encourages positive local action. • Inconvenience and annoyance for a minority of people: e.g., ill-fitting lids, insufficient volumes, lack of space, odours, pests, scavenging animals (Environics, 1990; McConnell Weaver, 1993). • Promotion of vermicomposting in apartments should increase awareness of role of apartment residents in 3Rs and may lead to greater support for and involvement in 3Rs. • Minor inconveniences associated with community composting. 	<ul style="list-style-type: none"> • Address complaints (e.g., ill-fitting lids, insufficient volume) of users. • Provide kitchen containers, home delivery of composters, on-going subsidies (Environics, 1990; Maclarens, 1990; Metropolitan Works Committee, 1992). • Target tenants with Promotion/Education programs and consultation program to maximize participation - modify composting program/components as required. • On-going education for proper use (Town of Markham, 1993). 	<ul style="list-style-type: none"> • Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. • Supports other 3Rs activities. • Variety of lifestyle inconveniences with all types of composting. • Encourages positive local action.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • White goods disposal may be increasingly inconvenient and difficult where curbside service is not provided, resulting in illegal dumping. • Consumers may become much more concerned about size and durability of appliances and furniture. • Residents may become more aware of HHW and white goods management and change purchasing attitudes. 	<ul style="list-style-type: none"> • Promote special waste days and special depots for multi-family building collection. • Make collection drop-off point convenient for all households and/or continue toxic taxi. • Develop promotional/educational materials to emphasize alternatives to HHW for pest control, lawn & garden, cleaning agents, and paint and solvents. Encourage the use of 3Rs for HHW and the separation of HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992). • Improve pick up services for white goods and large items. 	<ul style="list-style-type: none"> • Residents may become more aware of HHW and white goods management and change purchasing behaviour.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • May contribute to acceptance of using repaired/second hand items rather than buying new products (Quinte Regional Recycling, 1993). • Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness; and provide communal garage sales, flea markets, bazaars, etc. • Increased reuse activities may create concerns about participant liability and the risk of distribution of spoiled food. 	<ul style="list-style-type: none"> • Provide incentives for establishing reuse centres and for holding "garage" sales. • Training of food distribution groups in matters of contamination and spoilage. • Implement "Good Samaritan" legislation that absolves donors of responsibility. 	<ul style="list-style-type: none"> • Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products • Increased appeal and household economic benefits with future demographic changes. May contribute to neighbourhood cohesiveness: through communal garage sales, flea markets, bazaars, etc.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Potentially encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change. • Could increase demand for packaging reduction (Environics, 1990). 	<ul style="list-style-type: none"> • Expand and refine promotion/education programs to target non-participating groups and to allow for changes in demographic make-up of GTA (Environics, 1990; Morgan-Fraser, 1993). • Promotional/Educational programs should be based on successful programs (e.g., Folz & Hazlett, 1990). For example, pamphlets and brochures (in utility bills, etc.) and community information meetings. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. The role of the schools could be important, particularly for new Canadians whose children are receiving the only English instruction in the family. Many school boards have environmental education committees. 	<ul style="list-style-type: none"> • Potentially positive effect; encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change.

TABLE F6.6
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Mixed Waste Processing

Indicator: Potential Effects on Employment

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> - Minor direct employment gains. 	<ul style="list-style-type: none"> - Mitigation not required 	<ul style="list-style-type: none"> - Minor direct employment gains.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> - Minor direct employment gains. 	<ul style="list-style-type: none"> - Mitigation not required 	<ul style="list-style-type: none"> - Minor direct employment effect.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor direct increase in construction gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains. • Minor direct increase in construction gains.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Minor direct employment gains. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct employment gains.

TABLE F6.7
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Mixed Waste Processing

Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> Centralized windrow composting of leaf and yard waste New mixed waste processing and composting facility 	Minor economic benefits.	Mitigation not required	Minor direct economic benefits.
Reuse Centres and Activities <ul style="list-style-type: none"> Municipal reuse centre Private reuse centre (e.g. Re-Uze, Scarborough) Non-profit reuse centre (WASTEWISE, Halton) Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) Food reuse organization (such as Second Harvest) Special goods exchange days 	Minor direct economic benefits.	Mitigation not required	Minor direct economic benefits.
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	Minor direct economic benefits.	Mitigation not required	Minor direct economic benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Minor direct economic benefits. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor direct economic benefits.

TABLE F6.8
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Potential For Broad Social Impact

System : Residential Mixed Waste Processing.

Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industries

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • All landlords of multi-family buildings of greater than six units are required to provide space, facilities and staff time to accommodate recycling and may incur additional costs. 	<ul style="list-style-type: none"> • Landlords may need to include additional costs for recycling in annual rent review application. 	<ul style="list-style-type: none"> • Potential increase in costs for tenants and landlords.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Landlords may be required to provide space and equipment for composters and may experience increased costs associated with insect and rodent control, staff etc. 	<ul style="list-style-type: none"> • Province to consider increase in costs associated with composting services in annual rent review applications 	<ul style="list-style-type: none"> • Landlords may be required to provide space and equipment for composters and may experience increased costs associated with insect and rodent control, staff etc.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products). • Consumers inconvenienced by a lack of curbside disposal for white goods may contribute to a growing market for products which are smaller and more durable. 	<ul style="list-style-type: none"> • Retail stores could develop buy-back programs for large and bulky items. The consumer would then not be required to dispose of the items. 	<ul style="list-style-type: none"> • In the long term institutions and commercial enterprises may develop programs to "buy back" used white goods.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Local businesses may be concerned about liability involved in increased amounts of uses donated items 	<ul style="list-style-type: none"> • Implement "Good Samaritan" legislation that absolves donors of responsibility. 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> Drop-off depots for dry recyclables Depots located at transfer stations to provide recycling opportunities to self-haul generators Drop-off depots for multi-family residents not serviced by recycling Drop-off depot for rural households Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect
Residential Promotion and Education <ul style="list-style-type: none"> 3Rs promotion and education program, focused on the residential sector Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

TABLE F6.9
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Mixed Waste Processing

Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal	<ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • Local residents and businesses living or working near a mixed waste facility may receive more significant nuisance effects versus other region residents. 	<ul style="list-style-type: none"> • Mitigation same as "Potential Effects on Residents". 	<ul style="list-style-type: none"> • Significant negative distribution effect due to disproportionate share of impacts on some local communities, population groups and industries.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Positive effect for lower income groups as more low cost items available and adds potential market for these goods. • Positive social welfare benefit. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Positive effect for lower income groups as more low cost items available and adds potential market for these goods. • Positive social welfare benefit.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near the facility as they receive a disproportionate share of the negative effects of the facility. 	<ul style="list-style-type: none"> • Effective siting and management of facility. • Effective impact management and compensation program. 	<ul style="list-style-type: none"> • Potential negative distribution effects on some groups living near the facility as they receive a disproportionate share of the negative effects of the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Potential minor negative distribution effects on some groups living near the facility as they receive a disproportionate share of the negative effects. 	<ul style="list-style-type: none"> • Effective siting and management of facility. • Effective impact management and compensation program. 	<ul style="list-style-type: none"> • Potential minor negative distribution effects on some groups living near the facility as they receive a disproportionate share of the negative effects.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F6.10
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Mixed Waste Processing

Indicator: Distribution of Lifestyle Effects

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by rural residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Minor lifestyle inconvenience for those who must self-haul 	<ul style="list-style-type: none"> Mitigation not required

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Minor lifestyle distributional effect between multi-family and low density development. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Minor lifestyle distributional effect between multi-family and low density development.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> Centralized windrow composting of leaf and yard waste New mixed waste processing and composting facility 	No effect	Mitigation not required	No effect
Reuse Centres and Activities <ul style="list-style-type: none"> Municipal reuse centre Private reuse centre (e.g. Re-Uze, Scarborough) Non-profit reuse centre (WASTEWISE, Halton) Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) Food reuse organization (such as Second Harvest) Special goods exchange days 	No effect	Mitigation not required	No effect
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	No effect	Mitigation not required	No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

TABLE F6.11
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Distribution of Social Costs and Benefits

System : Residential Mixed Waste Processing
Indicator: Potential Future Generation Effects of System

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	Positive effect through the wiser use of resources for the use and enjoyment of future generations.	<ul style="list-style-type: none"> • Continue to promote and educate on 3Rs (Hay, ND; Lesnicki, 1993; Morgan-Fraser, 1993; Watson, 1993). • The likely over-all benefit to future generations needs to be emphasized in promoting these programs. It needs to be stressed that this generation is willing to make some sacrifices to ensure the future prosperity of their children/grandchildren. 	Potential positive effect through the wiser use of resources for the use and enjoyment of future generations.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Moderately costly to start-up and operate but environmentally beneficial in the long run. Should support change in behaviour to reduction and reuse. 	<ul style="list-style-type: none"> • Promotion and education aimed at increasing future participation rates (Environics, 1990). 	<ul style="list-style-type: none"> • Potential positive effect of passing on a healthier environment through support for change in behaviour to reduction and reuse.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse and proper disposal. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential positive effect of providing a healthier environment for the future through support for change in behaviour to repair, reuse and proper disposal.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effect
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Should encourage/support repair and reuse of white goods etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future. 	<ul style="list-style-type: none"> • Province to consider removing Provincial Sales Tax or other provincial taxes for the sale of used goods. 	<ul style="list-style-type: none"> • Potential positive effect through the support for repair and reuse of good, and subsequent reduction of resource use.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Costly to start-up and operate because of market development, but environmentally and possibly economically beneficial in the long run. Current generation paying the cost for altering behaviour to more sustainable behaviour. Required support for recycling. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future generations with a healthier environment and more resources available.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Current generation behaviour paying cost for altering behaviour to a more sustainable society. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor positive effect as the current generation is paying the cost for changing to more sustainable behaviour which should leave future generations with a healthier environment and more resources available.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Should have positive effects in changing current attitudes and behaviours to a more sustainable society which should leave future generations with cleaner environment and more resources available. 	<ul style="list-style-type: none"> • Education material could emphasize the benefits to future generation of 3Rs actions today. 	<ul style="list-style-type: none"> • Potential positive effects in changing current attitudes and behaviour to a more sustainable society which should leave future generations with cleaner environment and more resources available.

TABLE F7.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Existing

Indicator: Participation in 3R's by Individuals, Municipalities, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors. • Self haul of garbage to landfills and transfer stations by residents. • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> High participation rates but vary with municipality (Environics, 1990; Hay, ND) Greatest participation by single family residences (Gale, 1990) (Environics, 1990)(Hay, ND) Some groups (eg, lower SES) and households less accepting/willing to participate (Lansana, 1992; Howenstine, 1993; Everett et al, 1992)(Environics, 1990)(Hay, ND) Participation may be limited by a lack of opportunities for multi-family residents (less participation by high rise, high and medium density multi-family buildings) 	<ul style="list-style-type: none"> Additional measures (eg, block-leader/floor monitor approaches) may be needed to involve different ethnicities and lower SES groups (Bagby, Diangson and Patterson, 1992; Burn, 1991; Everett et al, 1992; Howenstine, 1993; Lansana, 1991; Hager, 1992) Modify program as required to address concerns of elderly (Bagby, 1993) 	<ul style="list-style-type: none"> Participation may be limited by a lack of opportunities for multi-family residents (less participation by high rise, high and medium density multi-family buildings). Participation by single families likely to continue at the 1994 rate.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> Seasonal curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pick up. Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience. 	<ul style="list-style-type: none"> Spring, Summer, and Fall reminders to low density residences and apartment superintendents 	<ul style="list-style-type: none"> General acceptance of collection. Potential minor increase in proportion of households participating. Drop-off will not be undertaken by many.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • Residential composting participation is potential with those who have the facilities (Environics, 1990) It may be limited to physically mobile people with yard space. A high proportion of those with backyard composters use them. • Participation in multi-family residences is unknown, but expect low participation (Glenn, 1993). 	<ul style="list-style-type: none"> • Continue subsidies of units, provide home delivery and provide multi-lingual instruction for household composters. • Provide composting services for residents in multi-family dwellings and support with promotion/education program. • Support community composting with strong education/promotion and back up with proper management and community involvement in operations. 	<ul style="list-style-type: none"> • Expanded household composting in low and medium residential areas. • Participation in multi-family residences is unknown, but expect low participation (Glenn, 1993). • Vermicomposting likely to have low rates of participation. • Participation in community composting expected to be low. • Participation in backyard composting is likely to remain constant.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods • Greater participation by individuals in pick up services (eg, toxic taxis, mobile HHW depots, white goods collection) 	<ul style="list-style-type: none"> • Provide call in pick up service for white goods and bulky items 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods • Greater participation by individuals in pick up services (eg, toxic taxis, mobile HHW depots, white goods collection)

Component Category/Components	Potential Effects	Mitigation/Balancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • In short term, increasing awareness of availability of reusable goods and increased shopping at reuse centres. • Longer term demand for used goods uncertain. 	<ul style="list-style-type: none"> • Support with promotion/education program emphasizing the benefits of reuse. • Province to consider sales tax reduction for the purchase of used goods. 	<ul style="list-style-type: none"> • Short term increase in shopping at reuse centres. Longer term demand for used goods uncertain.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • Provides greater opportunities to participate and may marginally increase participation by residents. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor increase in participation resulting from additional opportunities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • Generally acceptable and important to maintaining and increasing participation. Indications from response to hot lines, etc. are that people want more information (Environics, 1990; Watson, 1993) 	<ul style="list-style-type: none"> • Expand and refine promotion/education programs as required based on changing demographics, ethnic/language groups (Bagby, Diangson, and Patterson, 1992). • Promotional/Education programs should be based on the successful programs identified in the 3Rs literature (Folz and Hazlett, 1990) For example, pamphlets & brochures (in utility bills, etc) and community information meetings • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. Many school boards have environmental education committees. 	<ul style="list-style-type: none"> • Potentially positive effect through increased participation in 3Rs activities.

TABLE F7.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Existing
Indicator: Attitudes and perception to 3Rs Activities

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Attitudes toward self-haul and landfill bans uncertain. 	<ul style="list-style-type: none"> Mitigation not required Attitudes toward self-haul and landfill bans uncertain.
Residential Recycling and Collection	<ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Acceptable for low density development provided source separation and pick-up is understood and convenient 	<ul style="list-style-type: none"> Continue to support with promotion/education programs Ensure convenience of system to maintain positive attitudes Programs designed for specific community groups (i.e. sensitive to ethnic and language diversity) may lead to more positive attitudes Positive effect by maintaining or increasing positive attitudes to 3Rs.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up 	<ul style="list-style-type: none"> • Spring, summer and fall reminders to low density residences and apartment superintendents. 	<ul style="list-style-type: none"> • No effect
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • Backyard composting acceptable for single family households. Continued use and acceptance anticipated. Evidence of acceptance for multi-family building residents uncertain. • Positive attitudes towards composting will be enhanced, provided the nuisance concerns (see Broad Social Impact) are mitigated. 	<ul style="list-style-type: none"> • Mitigate nuisance effects. 	<ul style="list-style-type: none"> • General growth in positive attitudes to 3Rs supported by household composting. • Potential for residents of multi-family households to develop negative attitudes to composting if odour and insect problems occur.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor positive attitudinal effect to support 3Rs by the provision of other convenient recycling options. HHW collection has a positive effect as social awareness is created about household hazardous waste. • Could be concerns regarding spills by the toxic taxis, but generally people are familiar with HHW and accepting of its management. • Potential concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material. • Potential short-term concerns about reductions in white goods collection 	<ul style="list-style-type: none"> • Ensure public consultation and participation to address concerns related to HHW. 	<ul style="list-style-type: none"> • Minor positive attitudinal effect to support 3Rs by the provision of other convenient recycling options. • Potentially a positive attitudinal effect.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. 	<ul style="list-style-type: none"> • Ensure public consultation and participation as part of the siting and monitoring process, and to address concerns related to existing composting facilities. 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> Positive public and municipal attitudes; socially and environmentally beneficial. Should reinforce positive attitudes to the 3Rs 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Positive effect by reinforcing positive attitudes to the 3Rs.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Currently acceptable. Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location. 	<ul style="list-style-type: none"> Address nuisance effects at existing facilities 	<ul style="list-style-type: none"> Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> Encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment. 	<ul style="list-style-type: none"> Attitudes may be enhanced by informing residents as to the success of the program (Siebel, 1993) 	<ul style="list-style-type: none"> Positive effect; encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • Increases awareness of the need for and benefit of 3Rs. Will motivate people to participate. • Consumer education will promote changes in shopping behaviour and changes in product design (durable, repairable) and packaging (reduction and recyclable). 	<ul style="list-style-type: none"> • Expand promotion and education programs. • Support schools with information, financial assistance and educational materials for 3Rs education. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. 	<ul style="list-style-type: none"> • Increases awareness of the need for and benefits of 3Rs. Will motivate people to participate. Consumer education will promote changes in shopping behaviour for changes in product design (durable, repairable) and packaging (reduction and recycle).

TABLE F7.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Existing
Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required
Residential Recycling and Collection	<ul style="list-style-type: none"> Curbside collection of Blue Box materials from single family dwellings. Typical materials include at least ONP, PET, HDPE, glass, ferrous, aluminum Expanded curbside collection to collect additional dry materials in some municipalities Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> Residents and municipalities are willing to pay part of the cost of operating the collection system. 	<ul style="list-style-type: none"> Mitigation not required

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Potential future concerns about the cost of leaf and yard waste collection and composting. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential future concerns about the cost of leaf and yard waste collection and composting.
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Limited community composting • Limited vermicomposting 	<ul style="list-style-type: none"> • A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost for composters or for those who have not purchased a composter. • Uncertain of the willingness of landlords and tenants to pay for bins. 	<ul style="list-style-type: none"> • Support promotion of composting with education on benefits. • Continue or increase subsidy for composters. 	<ul style="list-style-type: none"> • A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have not purchased a composter. • Uncertain of the willingness of landlords and tenants to pay for the bins.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	Uncertain of the willingness of municipalities to pay for white goods and HHW collection. Municipalities appear willing to pay for depots.	<ul style="list-style-type: none"> • Region/Province to examine product stewardship for white goods • Region/Province to examine effectiveness of HHW management, and examine possibilities for joint programs with private sector 	<ul style="list-style-type: none"> • Municipalities may be less willing to pay the cost of white goods and HHW pick up.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • In the longer term, the higher costs of locating and operating a composting facility may become an issue for some people. 	<ul style="list-style-type: none"> • Education program to address the benefits and the need for composting facilities. 	<ul style="list-style-type: none"> • In the longer term, the higher costs of locating and operating a composting facility may become an issue for some people.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Some people are willing to purchase used goods (Quinte Recycling Centre, 1993). If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Local government and residents may be willing to pay for the facilities. • Lower income groups may not be willing\able to pay tax increases. 	<ul style="list-style-type: none"> • Provide municipal tax or rent relief to those residents unable to pay increase costs. 	<ul style="list-style-type: none"> • Local government and residents may be willing to pay for the facilities.
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not served by recycling • Drop-off depot for rural households 	<ul style="list-style-type: none"> • Local government and residents appear willing to pay for the facilities. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Local government and residents appear willing to pay for the facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. 	<ul style="list-style-type: none"> • Local government and residents likely to continue to support this activity. • Increase funding of 3Rs education at local level. 	<ul style="list-style-type: none"> • Programs should be linked to a public consultation program to address the specific needs of each region. 	<ul style="list-style-type: none"> • Local government and residents likely to continue to support this activity.

TABLE F8.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Existing/Committed

Indicator: Participation in 3R's by Individuals, Municipalities, IC&I Sector, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Recycling legislation forces participation by restricting items placed out for disposal although some residents will not support it. In the longer term, compliance is likely to increase. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Recycling legislation forces participation by restricting items placed out for disposal although some residents will not support it. In the longer term compliance is likely to increase.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • High participation rates but vary with municipality (Environics, 1990; Hay, ND). • Greatest participation by single family residences (Gale, 1990; Environics, 1990; Hay, ND). • Some groups (e.g., lower SES) and households less accepting/willing to participate (Lansana, 1992; Howenstine, 1993; Everett et al., 1992; Environics, 1990; Hay, ND). • With an aging population, the elderly may have some difficulties in participating in the program. • Will allow residents of multiple-family residences the opportunity to participate resulting in an overall increase in participation. 	<ul style="list-style-type: none"> • Expand recycling and collection service to multi-family buildings and provide at a minimum the same level of convenience as single-family residents. To encourage apartment dwellers to participate use apartment committee and block volunteer approach (Bagby, 1993) and ensure distribution of clear information (Hager, 1992; Spaccarelli, 1990). • Work with apartment building owners/managers to develop most appropriate collection system (Von Mirbach, 1993; Hager, 1990). • Additional measures (e.g., block-leader approaches) may be needed to involve different ethnicities and lower SES groups (Bagby, Diangson and Patterson, 1992; Burn, 1991; Everett et al., 1992; Howenstine, 1993; Lansana, 1991; Hager, 1992) • Modify program as required to address concerns of elderly (Bagby, 1993). 	<ul style="list-style-type: none"> • Greater participation throughout residential sector with largest gains in multi-family groups.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pick up. • Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience. 	<ul style="list-style-type: none"> • Spring, Summer and Fall reminders to low density residences and apartment superintendents 	<ul style="list-style-type: none"> • General acceptance of collection; participation levels likely to remain constant. Drop-off will not be undertaken by many.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • Residential composting participation is possible with those who have the facilities (Environics, 1990). It may be limited to physically mobile people with yard space. A high proportion of those with backyard composters use them. • Participation in community and apartment composting is uncertain, but expected to be low. 	<ul style="list-style-type: none"> • Continue subsidies of units, provide home delivery and provide multi-lingual instruction for household composters. • Provide composting services for residents in multiple-family dwellings and support with promotion/education program. • Support community composting with strong education/promotion and back up with proper management and community involvement in operations. 	<ul style="list-style-type: none"> • Expanded household composting in low and medium density residential areas. • Participation in multi-family residences is unknown, but expected to be low. (Glenn, 1993) • Participation in backyard composting likely to remain constant. • Vermicomposting likely to have low rates of participation.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods • Greater participation by individuals in pick-up services (eg. toxic taxis, mobile HHW depots, white goods and bulky items collection). 	<ul style="list-style-type: none"> • Provide call in pick-up service for bulky items and white goods 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods • Greater participation by individuals in pick-up services (eg. toxic taxis, mobile HHW depots, white goods and bulky items collection).

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • In short term increasing awareness of availability of reusable goods and increased shopping at reuse centres. Longer term demand for used goods uncertain. 	<ul style="list-style-type: none"> • Support with promotion/education program emphasising the benefits of reuse. • Province could consider sales tax reduction for the purchase of used goods. 	<ul style="list-style-type: none"> • Short term increase in shopping at reuse centres. Longer term demand for used goods uncertain.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Provides additional opportunities to participate and should increase participation by residents marginally. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor increase in participation resulting from increased opportunity.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • Generally acceptable and important to maintaining and increasing participation. Indications from response to hot lines, etc. are that people want more information (Environics, 1990; Watson, 1993). 	<ul style="list-style-type: none"> • Expand and refine promotion/education programs as required based on changing demographics, ethnic/language groups (Bagby, Diangson, and Patterson, 1992). • Promotion/Education programs should be based on the successful programs identified in the 3Rs literature (Folz and Hazlett, 1990). For example, pamphlets & brochures (in utility bills, etc.) and community information meetings. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. Many school boards have environmental education committees and the schools are increasingly being led by Principals and Vice-Principals with an environmental message. 	<ul style="list-style-type: none"> • Potentially positive effect through increased participation in 3Rs activities.

TABLE F8.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Existing/Committed
Indicator: Attitudes and perception to 3Rs Activities

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors. Self haul of garbage to landfills and transfer stations by residents. Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Attitudes toward self-haul, regional recycling legislation and landfill bans uncertain. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Attitudes toward self-haul, regional recycling legislation and landfill bans uncertain.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Acceptable for low-density development, provided source separation and pick-up is understood and convenient. • Provision of recycling service to all apartments over 6 units will provide long term support for 3Rs and should increase waste diversion. 	<ul style="list-style-type: none"> • Continue to support with promotion/education programs. • Ensure convenience of system to maintain positive attitudes. • Programs designed for specific community groups (i.e. sensitive to ethnic and language diversity) may lead to more positive attitudes. • Positive attitude toward recycling in multi-family buildings likely to be enhanced by allowing apartment owners/managers to choose the system for their building (Von Mirbach, 1993). 	<ul style="list-style-type: none"> • Positive effect by maintaining or increasing positive attitudes to 3Rs.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the amount of back yard composting undertaken. 	<ul style="list-style-type: none"> • Spring, summer and fall reminders to low density residences and apartment superintendents. 	<ul style="list-style-type: none"> • General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the amount of back yard composting undertaken.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • Backyard composting acceptable for low density family households. Continued use and acceptance anticipated. • Evidence of acceptance for multi-family building residents uncertain. • Positive attitudes towards composting will be enhanced, provided the nuisance concerns (see Broad Social Impact, Potential for Lifestyle changes) are mitigated. • Acceptance of community and vermicomposting is uncertain, but unlikely that there will be full acceptance. 	<ul style="list-style-type: none"> • Mitigate nuisance effects 	<ul style="list-style-type: none"> • General growth in positive attitudes to 3Rs supported by household composting. • Potential for residents of multi-family households to develop negative attitudes to composting if odour and insect problems occur.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor positive attitudinal effect to support 3Rs by the provision of other convenient recycling options. • HHW collection and drop-off days have a positive effect as social awareness is created about household hazardous waste. • Could be concerns regarding spills by the toxic taxi and mobile HHW depot, but generally people are familiar with HHW and accepting of its management. • Potential concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material. • Potential short-term concerns about reductions in white goods collection. 	<ul style="list-style-type: none"> • Ensure public consultation and participation to address concerns related to HHW. 	<ul style="list-style-type: none"> • Minor positive attitudinal effect to support 3Rs by the provision of other convenient recycling options.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. 	<ul style="list-style-type: none"> • Ensure public consultation and participation as part of the siting and monitoring process, and to address concerns related to existing composting facilities. 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	Positive public and municipal attitudes; socially and environmentally beneficial. Should reinforce positive attitudes to the 3Rs.	Mitigation not required	Positive effect by reinforcing positive attitudes to the 3Rs
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	Currently acceptable. Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.	Address nuisance effects at existing facilities	Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on locations.

Components/Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<p>Encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment.</p>	<p>Attitudes may be enhanced by informing residents as to the success of the program (Siebel, 1993).</p>	<p>Positive effect; encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment.</p>
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<p>Increases awareness of the need for and benefits of 3Rs. Will motivate people to participate.</p> <p>Consumer education will promote change in shopping behaviour and changes in product design (durable, repairable) and packaging (reduction and recyclable).</p>	<p>Expand promotion and education programs.</p> <p>Provide seminars, technical assistance and financial assistance to landlord organizations.</p> <p>Develop programs and support voluntary organizations who assist in 3Rs initiatives.</p> <p>Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents.</p> <p>Support schools with information, financial assistance and educational materials for 3Rs education.</p>	<p>Increased awareness of the need for and benefits of 3Rs. Will motivate people to participate.</p> <p>Consumer education will promote change in shopping behaviour for changes in product design (durable, repairable) and packaging (reduction and recycle).</p>

TABLE F8.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Existing/Committed
Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal	<ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors. • Self haul of garbage to landfills and transfer stations by residents. • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units (3Rs Regulations) • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Residents and municipalities are probably willing to pay part of the cost of operating the collection system. • Increased costs for landlord of providing recycling services likely to be passed on to tenants in rent increases. Willingness of tenants to pay increased rent is unknown. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • In short term, uncertain if tenants and landlords are willing to assume additional costs for recycling services.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Potential future concerns about the cost of leaf and yard waste collection and composting. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential future concerns about the cost of leaf and yard waste collection and composting.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Backyard composter distribution programs • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Additional community composting • Additional vermicomposting 	<ul style="list-style-type: none"> • A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have not purchased a composter. • Uncertain of the willingness of landlords and tenants to pay for bins. 	<ul style="list-style-type: none"> • Support promotion of composting with education on benefits. • Continue or increase subsidy for composters. 	<ul style="list-style-type: none"> • A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have not purchased a composter. • Uncertain of the willingness of landlords and tenants to pay for bins.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.). • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Uncertain of the willingness of municipalities to pay for white goods and HHW collection. Municipalities appear willing to pay for depots. 	<ul style="list-style-type: none"> • Region/Province to examine product stewardship for white goods. • Region/Province to examine effectiveness of HHW management, and examine possibilities for joint programs with private sector. 	<ul style="list-style-type: none"> • Municipalities may be less willing to pay the cost of white goods and HHW pick up.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • In the longer term the higher costs of locating and operating a composting facility may become an issue for some people. 	<ul style="list-style-type: none"> • Education program to address the benefits and the need for composting facilities. 	<ul style="list-style-type: none"> • In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Some people are willing to purchase used goods (Quinte Regional Recycling, 1993). If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Local government and residents appear willing to pay for the facilities. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Local government and residents appear willing to pay for the facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Municipalities and residents appear willing to pay for the facilities. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Local government and residents appear willing to pay for the facilities.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc 	<ul style="list-style-type: none"> • Local government and residents likely to continue to support this activity. 	<ul style="list-style-type: none"> • Programs should be linked to a public consultation program to address the specific needs of each region. • Increase funding of 3Rs education at local level. 	<ul style="list-style-type: none"> • Local government and residents likely to continue to support this activity

TABLE F9.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Direct Cost
Indicator: Participation in 3R's by Individuals, Municipalities, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads • Direct cost system for garbage collection 	<ul style="list-style-type: none"> • Recycling legislation forces participation in restricting items placed out for disposal, although some residents will not support it. In the longer term, compliance is likely to increase. • In the short term, some individuals and groups may not participate fully in the direct cost system due to initial opposition (e.g low-income residents and those from larger households may raise inequity issues)(Proctor and Redfern, 1993a), although in the longer term, participation is likely to increase.. • Any type of direct cost system implemented in a region where there is a significant proportion of high-rise buildings is likely to meet with mixed success (Skumatz and Zack, 1993; Krivit and Schmidt, 1992). A direct cost system intends to change waste management behaviour by adding an individual economic incentive. The incentive generally does not exist in buildings of multiple units (Bagby, 1993), unless there is broadly-based co-operation. • Potential public resistance to program, owing to perception of being "double-charged" (e.g. Peterborough - Globe and Mail, April 7, 1994). 	<ul style="list-style-type: none"> • Promotion/education and public consultation programs should help increase participation by individuals and special/sensitive groups over time. • Cooperation in the regions to share expertise and knowledge may remove some implementation barriers. • Programs need to be actively promoted/explained to counter possible negative reactions (e.g. Town of Kanata public consultation). 	<ul style="list-style-type: none"> • Recycling legislation forces participation in restricting items placed out for disposal, although some residents will not support it. In the longer term, compliance is likely to increase. • In the short term, some individuals and groups may not participate fully in the direct cost system due to initial opposition, although in the longer term, participation is likely to increase. • Any type of direct cost system implemented in a region where there is a significant proportion of high-rise buildings is likely to meet with mixed success (Skumatz and Zack, 1993; Krivit and Schmidt, 1992). • Levels of participation by individuals and municipalities uncertain because of general lack of experience in instituting a Direct Cost system in larger jurisdictions.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • High participation rates but vary with municipality (Environics, 1990; Hay, ND). • Greatest participation by single family residences (Gale, 1990; Environics, 1990; Hay, ND). • Potentially some groups (e.g., lower SES) and households less accepting/willing to participate (Lansana, 1992; Howenstine, 1993; Everett et al., 1992; Environics, 1990; Hay, ND). • Potential for higher contamination rates of Blue Boxes as households place non-recyclables in Blue Box to reduce amount of garbage. 	<ul style="list-style-type: none"> • Expand recycling and collection service to multi-family buildings and provide at a minimum the same level of convenience as single-family residents. To encourage apartment dwellers to participate, use apartment committee and block volunteer approach (Bagby, 1993) and ensure distribution of clear information (Hager, 1992; Spaccarelli, 1990). • Work with apartment building owners/managers to develop most appropriate collection system (Von Mirbach, 1993; Hager, 1990). • Additional measures (e.g., block-leader approaches) may be needed to involve different ethnicities and lower SES groups (Bagby, Diangson and Patterson, 1992; Burn, 1991; Everett et al., 1992; Howenstine, 1993; Lansana, 1991; Hager, 1992). • Modify program as required to address concerns of elderly (Bagby, 1993). • Public education and consultation will address many of the concerns (Reschevsky and Stone, 1994; Skumatz, 1993; Thivierge, 1992). 	<ul style="list-style-type: none"> • Greater participation throughout residential sector with largest gains in multi-family, lower income and ethnic groups.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pick up. • Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience. 	<ul style="list-style-type: none"> • Spring, summer, and fall reminders to low density residences and apartment superintendents. 	<ul style="list-style-type: none"> • General acceptance of collection. Probable increase in proportion of household participants. Drop-off will not be undertaken by many.
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Residential composting participation is possible with those who have the facilities (Environics, 1990). It may be limited to physically mobile people with yard space. A high proportion of those with backyard composters use them. • Vermicomposting has not met with wide acceptance and appears to have low rates of participation. • Participation in community composting is uncertain, but expected to be low due to inconvenience. • Participation in multi-tenant composting activities in urban areas is uncertain but likely to be low. 	<ul style="list-style-type: none"> • Continue subsidies of units, provide home delivery and provide multi-lingual instruction for household composters. • Support residents in multiple-family dwellings with promotion/education and consultation program to define the best composting system for each building. • Support community composting with strong education/promotion and back up with proper management and community involvement in operations. 	<ul style="list-style-type: none"> • Expanded participation in household composting in low and medium density residential areas. • Vermicomposting likely to have low rates of participation. • Participation in community composting expected to be low. • Participation in backyard composting and level of use of composter is likely to increase.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods • Greater participation by individuals in pick-up services (eg. toxic taxis, mobile HHW depots, white goods collection). 	<ul style="list-style-type: none"> • Provide call in pick up service for white goods. 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods. • Greater participation by individuals in pick-up services (e.g. toxic taxis, mobile HHW depots, white goods collection).
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • In short term increasing awareness of availability of reusable goods. Increase in shopping at reuse centres. Longer term demand for used goods uncertain. 	<ul style="list-style-type: none"> • Support with promotion/education program emphasizing the benefits of reuse. • Province to consider sales tax reduction for the purchase of used goods. 	<ul style="list-style-type: none"> • Short term increase in shopping at reuse centres. Longer term uncertain.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables, household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	Provides greater opportunity to recycle and may marginally increase participation.	Mitigation not required	Potential minor increase in participation resulting from increased opportunity.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<p>Generally acceptable and important to maintaining and increasing participation. Indications from response to hot lines, etc. are that people want more information (Envirronics, 1990; Watson, 1993; Morgan-Frazer, 1993; Lesnicki and Mercer, 1993; Foster, 1993).</p>	<ul style="list-style-type: none"> • Expand and refine promotion/education programs as required based on changing demographics, ethnic/language groups (Bagby, Diangson, and Patterson, 1992). • Promotional/Education programs should be based on the successful programs identified in the 3Rs literature (e.g., Folz and Hazlett, 1990). For example, pamphlets & brochures (in utility bills, etc.) and community information meetings. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. 	<p>Potentially positive effect through increased participation in 3Rs activities.</p>

TABLE F9.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Direct Cost
Indicator: Attitudes and perception to 3Rs Activities

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads • Direct cost system for garbage collection 	<ul style="list-style-type: none"> • Initially, there will be some negative attitudes on the part of the public to a direct cost system. It may be viewed by the public as an additional "tax" on citizens (Proctor and Redfern Ltd., 1993; Globe and Mail, April 7, 1994). This attitude may change by implementing a direct cost system designed specifically for the Region (Reschovsky and Stone, 1994; Skumatz, 1993; Thivierge, 1992). • In longer term, high participating households may perceive a distinct financial advantage over lower participating households, increasing their enthusiasm for the initiative. • Will not affect 3Rs participation in multi-family dwellings because it does not apply. • Attitudes toward self-haul, landfill bans and regional recycling legislation uncertain. 	<ul style="list-style-type: none"> • Public education and consultation will be important to enhancing positive attitudes. 	<ul style="list-style-type: none"> • Long term effects through increasing awareness and support for 3Rs of regional recycling legislation. • Initially, there will be some negative attitudes on the part of the public to a direct cost system. It may be viewed by the public as an additional "tax" on citizens (Proctor and Redfern Ltd., 1993; Globe and Mail, April 8, 1994). This attitude may change by implementing a direct cost system designed specifically for the Region (Reschovsky and Stone, 1994; Skumatz, 1993; Thivierge, 1992). Public education and consultation will be important to enhancing positive attitudes. • In longer term, high participating households may perceive a distinct financial advantage over lower participating households, increasing their enthusiasm for the initiative. • Attitudes toward self-haul, landfill bans and regional recycling legislation uncertain.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Acceptable for low-density development, provided source separation and pick-up is understood and convenient (Hager, 1992). • Provision of recycling service to all apartments over 6 units will provide long term support for 3Rs and should increase waste diversion (Hager, 1992). • Positive attitude toward recycling in multi-family buildings likely to be enhanced by allowing apartment owners/managers to choose system. 	<ul style="list-style-type: none"> • Continue to support with promotion/education programs. • Ensure convenience of system to maintain positive attitudes. • Programs designed for specific community groups (i.e. sensitive to ethnic and language diversity) may lead to more positive attitudes. 	<ul style="list-style-type: none"> • Positive effect by maintaining or increasing positive attitudes to 3Rs. • Positive attitude toward recycling in multi-family buildings likely to be enhanced by allowing apartment owners/managers to choose system.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the amount of backyard composting undertaken. 	<ul style="list-style-type: none"> • Spring, summer and fall reminders to low density residences and apartment superintendents. 	<ul style="list-style-type: none"> • Could reduce the amount of composting of leaf and yard waste done on-site.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Acceptable for low density family households. Continued use and acceptance anticipated. Evidence of acceptance for multi-family residents uncertain. Vermicomposting has not been accepted on a large scale; indications are that it may not be accepted in the long term. • Attitudes to community composting uncertain. • Potential for multi-family dwelling residents to develop negative attitudes toward composting if odour, insect and rodent problems and health concerns persist. 	<ul style="list-style-type: none"> • Provide promotion/education program and consultation program for multi-family residences. • Positive attitudes towards composting will be enhanced, provided the nuisance concerns (see Broad Social Impact) are mitigated. 	<ul style="list-style-type: none"> • General growth in positive attitudes to 3Rs supported by household composting. • Potential for multi-family residents to develop negative attitudes toward composting if odour, insect and rodent problems and health concerns persist.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • HHW collection and drop-off days have a positive effect as social awareness is created about household hazardous waste. • Could be concerns regarding spills by the toxic taxi and mobile HHW depot, but generally people are familiar with HHW and accepting of its management (Environics, 1990). • Potential concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material (Lesnicki, 1993). • Potential short-term concerns about reductions in white goods collection. 	<ul style="list-style-type: none"> • Ensure public consultation and participation to address concerns related to HHW. 	<ul style="list-style-type: none"> • Potentially a positive attitudinal effect
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. 	<ul style="list-style-type: none"> • Ensure public consultation and participation as part of the siting and monitoring process, and to address concerns related to existing composting facilities. 	<ul style="list-style-type: none"> • No effect

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	Positive, public and municipal attitudes; socially and environmentally beneficial. Should reinforce positive attitudes to the 3Rs.	Mitigation not required	Positive effect by reinforcing positive attitudes to the 3Rs.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	Currently acceptable. Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.	Address nuisance effects at existing facilities	Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	Encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment.	Attitudes may be enhanced by informing residents as to the success of the program (Siebel, 1993).	Positive effect; encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Increases awareness of the need for and benefits of 3Rs. Will motivate people to participate (Morgan-Frazer, 1992; Lesnicki, 1993). • Consumer education will promote change in shopping behaviour, in product design (durable, repairable) and packaging (reduction and recyclable). 	<ul style="list-style-type: none"> • Expand promotion and education programs. • Province to assist with cost and planning, if required. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. 	<ul style="list-style-type: none"> • Increase awareness of the need for and benefits of 3Rs. Will motivate people to participate. • Consumer education could promote change in shopping behaviour and demand for changes in product design (durable, repairable) and packaging (reduction and recycle).

TABLE F9.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Direct Cost
Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads • Direct cost system for garbage collection 	<ul style="list-style-type: none"> • Implementing a direct cost system in multiple-family dwellings is difficult because of the lack of individual economic incentive to recycle (difficult to identify who disposes of the garbage). • Evidence of the acceptance of direct cost is mixed; there may be some opposition - perception of a free service being removed (Proctor and Redfern Ltd., 1993; Ekos Research Assoc., 1993; Globe and Mail, April 8, 1993) • Potential for the system to be seen as a regressive tax system affecting lower-income groups the most. • After the phase in period households may realize the benefit of diverting their waste through lower costs. • Municipalities may find administration and monitoring complex, thus adding to the collection costs. A Direct Cost System may not be worth their effort (Pollock, 1993.) 	<ul style="list-style-type: none"> • Prior to the implementation of direct cost for garbage collection, local tax assessments should have a portion of the tax bill specifically designated for waste management or a specific waste management levy similar to the water and sewer fees (e.g Town of Kanata). This tends to encourage people to think about the costs of garbage and waste management. Following an adjustment period, people can more readily understand volume or weight-based rate direct cost systems (e.g. Seattle). Other important measures that mitigate the negative effects of a direct cost system include: the provision of an expanded recycling program, leaf/yard waste collection, backyard composters and HHW service, free or at minimal costs; and enforcement to deal with illegal dumping. • Develop a direct cost and collection system that is appropriate for apartment households. • Provide incentives to apartment owners to provide recycling services to tenants. • Consider ways of easing the burden on lower income and large households for direct cost garbage collection (equity concerns). • Administration and implementation costs of a Direct Cost System will be funded from existing municipal services. 	<ul style="list-style-type: none"> • Initial opposition to increased costs of collection of garbage without decrease in taxes. • Lower income households and larger households may be unable/unwilling to pay directly for garbage collection. • The costs to the municipality of a direct cost system may outweigh the benefits. • After the phase-in period, households are likely to realize the benefit of diverting their waste through lower costs.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	Residents and municipalities are willing to pay part of the cost of operating the collection system. Willingness of tenants and landlords to pay increased costs is uncertain.	The region could provide advice/audits to apartment owners on the best and lowest-cost recycling opportunities.	Willingness of tenants and landlords to pay increased costs is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites). 	<ul style="list-style-type: none"> • Potential future concerns about the cost of leaf and yard waste collection and composting. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential future concerns about the cost of leaf and yard waste collection and composting.
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households. • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost for composters for those who have not purchased a composter. • Uncertain of the willingness of landlords and tenants to pay for composting facilities. 	<ul style="list-style-type: none"> • Support promotion of composting with education on benefits. • Continue/increase subsidy for composters. 	<ul style="list-style-type: none"> • A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost for composters for those who have not purchased a composter. • Uncertain of the willingness of landlords and tenants to pay for composting facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Uncertain of the willingness of municipalities to pay for white goods and HHW collection. Willing to pay for depots. 	<ul style="list-style-type: none"> • Region/Province to examine product stewardship for white goods. • Region/Province to examine effectiveness of HHW management, and examine possibilities for joint programs with private sector. 	<ul style="list-style-type: none"> • Municipalities may be less willing to pay the cost of white goods pick up and HHW.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Region and residents willing to partially fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people. 	<ul style="list-style-type: none"> • Education program to address the benefits and the need for composting facilities. 	<ul style="list-style-type: none"> • Region and residents willing to partially fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<p>Some people are willing to purchase used goods (Quinte Regional Recycling, 1994). If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.</p>	<p>Mitigation not required</p>	<p>Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.</p>
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<p>Uncertain if municipalities and residents appear willing to pay for the facilities provided subsidies continue.</p>	<p>Mitigation not required</p>	<p>Uncertain if municipalities and residents appear willing to pay for the facilities provided subsidies continue.</p>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Uncertain if municipalities and residents appear willing to pay for the facilities provided subsidies continue. 	<ul style="list-style-type: none"> • Mitigation to include government or private sector subsidies 	<ul style="list-style-type: none"> • Uncertain if municipalities and residents appear willing to pay for the facilities provided subsidies continue.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on direct cost system • Promotion/education program on source reduction/pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • The Region and residents likely to continue to support this activity. 	<ul style="list-style-type: none"> • Programs should be linked to a public consultation program to address the specific needs of each region. • Increase funding of 3Rs education at local level. 	<ul style="list-style-type: none"> • The Region and residents likely to continue to support this activity.

TABLE F10.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Expanded Blue Box
Indicator: Participation in 3R's by Individuals, Municipalities, IC&I Sector, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by rural residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Recycling legislation forces participation in restricting items placed for disposal, although some residents will not support it. In the longer term, compliance is likely to increase. 	<ul style="list-style-type: none"> Mitigation not required Recycling legislation forces participation in restricting items placed for disposal, although some residents will not support it. In the longer term, compliance is likely to increase.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> • High participation rates but vary with municipality (Environics, 1990; Hay, ND). • Greatest participation by single family residences (Gale, 1990; Environics, 1990; Hay, ND). • Some groups (e.g., lower SES) and households potentially less accepting/willing to participate (Lansana, 1992; Howenstine, 1993; Everett et al., 1992; Environics, 1990; Hay, ND). • With an aging population, the elderly may have some difficulties in participating. • Will allow residents of multiple-family residences the opportunity to participate resulting in an overall increase in participation. 	<ul style="list-style-type: none"> • To encourage apartment dwellers to participate use apartment committee and block volunteer approach (Bagby, 1993) and ensure distribution of clear information (Hager, 1992; Spaccarelli, 1990). • Work with apartment building owners/managers to develop most appropriate collection system (Von Mirbach, 1993; Hager, 1990). • Additional measures (e.g., block-leader approaches) may be needed to involve different ethnicities and lower SES groups (Bagby, Diangson and Patterson, 1992; Burn, 1991; Everett et al., 1992; Howenstine, 1993; Lansana, 1991; Hager, 1992). • Modify program as required to address concerns of elderly (Bagby, 1993). 	<ul style="list-style-type: none"> • Greater participation throughout residential sector with largest gains in multi-family, lower-income and ethnic groups. • Increase in types of material recycled.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pick up. • Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience. 	<ul style="list-style-type: none"> • Spring, summer, and fall reminders to low density residences and apartment superintendents. 	<ul style="list-style-type: none"> • General acceptable of collection Drop-off will not be undertaken by many.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Residential composting participation is possible with those who have the facilities (Environics, 1990). It may be limited to physically mobile people with yard space. A high proportion of those with backyard composters use them. • The participation in multi-tenant dwelling composting activities in urban areas is uncertain, but likely to be low. • Vermicomposting has not met with wide acceptance and appears to have low rates of participation. • Participation in community composting is uncertain, but expected to be low, due to inconvenience. 	<ul style="list-style-type: none"> • Continue subsidies of units, provide home delivery and provide multi-lingual instruction for household composters. • Support residents in multiple-family dwellings with promotion/education and consultation program to define the best composting system for each building. • Support community composting with strong education/promotion and back up with proper management and community involvement in operations. 	<ul style="list-style-type: none"> • Expanded participation household composting in low and medium density residential areas. • Vermicomposting is likely to have low rates of participation. • Participation in community composting is uncertain, but expected to be low. • Participation in backyard composting likely to remain at 1994 levels.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods. • Greater participation by individuals in pick-up services (eg. toxic taxis, mobile HHW depots, white goods collection). 	<ul style="list-style-type: none"> • Provide call-in pick-up service for white goods. 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods. • Greater participation by individuals in pick-up services (eg. toxic taxis, mobile HHW depots, white goods collection).
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • In short term increasing awareness of availability of reusable goods. Increase in shopping at reuse centres. Longer term demand for used goods uncertain. 	<ul style="list-style-type: none"> • Support with promotion/education program emphasizing the benefits of reuse. • Province to consider sales tax reduction for the purchase of used goods. 	<ul style="list-style-type: none"> • Short term growth in shopping at reuse centres. Longer term uncertain.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Provides greater opportunity to recycle and may have small increase in participation. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor increase in participation resulting from increased opportunity.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<p>Generally acceptable and important to maintaining and increasing participation. Indications from response to hot lines, etc. are that people want more information (Environics, 1990; Watson, 1993; Morgan and Fraser, 1993; Lesnicki and Mercer, 1993; Foster, 1993).</p>	<ul style="list-style-type: none"> • Expand and refine promotion/education programs as required based on changing demographics, ethnic/language groups (Bagby, Diangson, and Patterson, 1992). • Promotional/Education programs should be based on the successful programs identified in the 3Rs literature (e.g., Folz and Hazlett, 1990). For example, pamphlets & brochures (in utility bills, etc.) and community information meetings. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. Many school boards have environmental education committees and the schools are increasingly being led by Principals and Vice-Principals with an environmental message. 	<p>Potentially positive effect through increased participation in 3Rs activities and changes to lifestyle.</p>

TABLE F10.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Expanded Blue Box
Indicator: Attitudes and perception to 3Rs Activities

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • Attitudes toward self-haul, landfill bans and regional recycling legislation uncertain. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Attitudes toward self-haul, landfill bans and regional recycling legislation uncertain.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Curbside collection of Expanded Blue Box materials including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services for full range of Expanded Blue Box materials at all multi-family buildings with 6 or more units • Collection of bins of recyclables (collecting all Expanded Blue Box materials) from multi-family units 	<ul style="list-style-type: none"> • Provision of recycling service to all apartments over 6 units will provide long term support for 3Rs and should increase waste diversion. • Acceptable in low-density areas, particularly if still as convenient 	<ul style="list-style-type: none"> • Continue to support with promotion/education programs. • Ensure convenience of system to maintain positive attitudes. • Programs designed for specific community groups (i.e. sensitive to ethnic and language diversity) may lead to more positive attitudes. 	<ul style="list-style-type: none"> • Positive effect by maintaining or increasing positive attitudes to 3Rs.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the amount of back yard composting undertaken. 	<ul style="list-style-type: none"> • Spring, summer and fall reminders to low density residences and apartment superintendents. 	<ul style="list-style-type: none"> • General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the amount of back yard composting undertaken.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Acceptable for low density family households. Continued use and acceptance anticipated. Evidence of acceptance for multi-family dwelling residents uncertain. Vermicomposting has not been accepted on a large scale; indications are that it may not be accepted in the long term. • Attitudes to community composting uncertain. • Potential for multi-family dwelling residents to develop negative attitudes toward composting if odour, insect and rodent problems and health concerns persist. 	<ul style="list-style-type: none"> • Provide promotion/education program and consultation program for multi-family residences. • Positive attitudes towards composting will be enhanced, provided the nuisance concerns (see Broad Social Impact) are mitigated. 	<ul style="list-style-type: none"> • General growth in positive attitudes to 3Rs supported by household composting. • Potential for multi-family residents to develop negative attitudes toward composting if odour, insect and rodent problems and health concerns persist.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods Collection, White Goods Drop-Off etc.). <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • HHW collection and drop-off days have a positive effect as social awareness is created about household hazardous waste. • Could be concerns regarding spills by the toxic taxi and mobile HHW depot, but generally people are familiar with HHW and accepting of its management. • Potential concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material. • Potential short-term concerns about reductions in white goods collection. 	<ul style="list-style-type: none"> • Ensure public consultation and participation to address concerns related to HHW. 	<ul style="list-style-type: none"> • Potentially a positive attitudinal effect.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. 	<ul style="list-style-type: none"> • Ensure public consultation and participation as part of the siting and monitoring process, and to address concerns related to existing composting facilities. 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> Positive, public and municipal attitudes; socially and environmentally beneficial. Should reinforce positive attitudes to the 3Rs. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Positive effect by reinforcing positive attitudes to the 3Rs.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Currently acceptable. Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location. 	<ul style="list-style-type: none"> Address nuisance effects at existing facilities. 	<ul style="list-style-type: none"> Minor effect. Traffic, noise and litter may reduce the acceptability of some facilities, depending on location.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots (collecting all Expanded Blue Box materials) for multi-family residents not serviced by recycling • Drop-off depots (collecting all Expanded Blue Box materials) for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment. 	<ul style="list-style-type: none"> • Attitudes may be enhanced by informing residents as to the success of the program (Siebel, 1993). 	<ul style="list-style-type: none"> • Positive effect; encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on Expanded Blue Box program • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Increases awareness of the need for and benefits of 3Rs. Will motivate people to participate. • Consumer education will promote change in shopping behaviour changes in product design (durable, repairable) and packaging (reduction and recyclable). 	<ul style="list-style-type: none"> • Expand promotion and education programs. Province to assist with cost and planning if required. • Support schools with information, financial assistance and educational materials for 3Rs education. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. 	<ul style="list-style-type: none"> • Increase awareness of the need for and benefits of 3Rs. Will motivate people to participate. • Consumer education could promote change in shopping behaviour and demand for changes in product design (durable, repairable) and packaging (reduction and recycle).

TABLE F10.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Expanded Blue Box
Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal	<ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Residents and municipalities are willing to pay part of the cost of operating the collection system. Uncertain if all municipalities are willing to take on extra costs of Expanded Blue Box. • Increased costs for landlord of providing recycling services likely to be passed on to tenants in rent increases. Willingness of tenants to pay increased rent is unknown. 	<ul style="list-style-type: none"> • The region could provide advice/audits to apartment owners on the best and lowest cost recycling opportunities. 	<ul style="list-style-type: none"> • In short term uncertain if tenants and landlords are willing to assume additional costs for recycling services. • Uncertain if all municipalities are willing to take on extra costs of Expanded Blue Box.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Potential future concerns about the cost of leaf and yard waste collection and composting. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential future concerns about the cost of leaf and yard waste collection and composting.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have not purchased a composter. • Uncertain of the willingness of landlords and tenants to pay for high costs. 	<ul style="list-style-type: none"> • Support promotion of composting with educational of benefits. • Continue/increase subsidy for composters. 	<ul style="list-style-type: none"> • A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have not purchased a composter. • Uncertain of the willingness of landlords and tenants to pay for high costs.
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Uncertain of the willingness of municipalities to pay for white goods and HHW collection. Willing to pay for depots. 	<ul style="list-style-type: none"> • Region/Province to examine product stewardship for white goods. • Region/Province to examine effectiveness of HHW management, and examine possibilities for joint programs with private sector. 	<ul style="list-style-type: none"> • Municipalities may be less willing to pay the cost of white goods pick-up and HHW.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> Centralized windrow composting of leaf and yard waste 	<ul style="list-style-type: none"> Region and residents willing to partially fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people. 	<ul style="list-style-type: none"> Education program to address the benefits and the need for composting facilities. 	<ul style="list-style-type: none"> Region and residents willing to partially fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.
Reuse Centres and Activities <ul style="list-style-type: none"> Municipal reuse centre Private reuse centre (e.g. Re-Uze, Scarborough) Non-profit reuse centre (WASTEWISE, Halton) Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) Food reuse organization (such as Second Harvest) Special goods exchange days 	<ul style="list-style-type: none"> Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.
MRFs <ul style="list-style-type: none"> Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Uncertain if municipalities and residents appear willing to pay for the facilities. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Uncertain if municipalities and residents appear willing to pay for the facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Uncertain if municipalities and residents appear willing to pay for the facilities. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Uncertain if municipalities and residents appear willing to pay for the facilities.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Local government and residents likely to continue to support this activity. 	<ul style="list-style-type: none"> • Programs should be linked to a public consultation program to address the specific needs of each region. • Increase funding of 3Rs education at local level. 	<ul style="list-style-type: none"> • The Region and residents likely to continue to support this activity.

TABLE F11.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Wet/Dry
Indicator: Participation in 3Rs by Individuals, Municipalities, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Self haul of garbage to landfills and transfer stations by rural residents • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • Recycling legislation forces participation in restricting items placed out for disposal, although some residents will not support it. In the longer term, compliance is likely to increase. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Recycling legislation forces participation in restricting items placed out for disposal, although some residents will not support it. In the longer term, compliance is likely to increase.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<p>Wet/Dry systems require more extensive participation than traditional Blue Boxes. When people do not participate in Blue Box programs, there is the loss of potential recyclables. With a wet/dry system, if participation is not extensive enough, there is a strong likelihood of contamination of either the wet or dry stream. If contamination is too high it can seriously jeopardise the compost quality and become a costly sorting exercise (Taylor, 1993).</p> <p>If the Wet/Dry system is not convenient for persons in various types of residences, participation may be very low.</p> <p>With an aging population, the elderly may have some difficulties in participating in the program.</p> <p>Will allow some residents of multiple-family dwellings the opportunity to participate, resulting in an overall increase in participation. Although uncertain of applicability to multiple residence buildings, but expected to be low, particularly for wet stream.</p>	<p>Promotion/education and public consultation programs would be absolutely essential in ensuring high levels of participation and adequate sorting on the part of residents. These efforts should be targeted in particular to non-participating groups and residences subject to higher turnover.</p> <p>Ensure the provision of convenient systems designed for various types of residences. Work with apartment building owners/managers to develop most appropriate collection system (Von Mirbach, 1993; Hager, 1990).</p> <p>Additional measures (e.g., block-leader approaches) may be needed to involve different ethnicities and lower SES groups (Bagby, Diangson and Patterson, 1992; Burn, 1991; Everett, et al., 1992; Howenstine, 1993; Lansana, 1991; Hager, 1992).</p> <p>Modify program as required to address concerns of elderly (Bagby, 1993).</p>	<p>Wet/Dry Systems require high levels of commitment by participants to prevent contamination of wet and dry streams. The highest levels of participation and commitment are most likely in single-family residences because of low turnover and more storage space than multiple-family residences.</p> <p>Participation rates may not be high enough to prevent contamination.</p>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection (cont'd)	<ul style="list-style-type: none"> • It is difficult to predict the participation rate in Wet/Dry schemes. In Guelph, the Wet/Dry program achieved 62% diversion of the residential waste stream (City of Guelph, 1991). However, the project comprised fewer than 1000 residences, primarily single-family dwellings and extensive promotion and education (City of Guelph, 1991). Guelph is unlike the GTA in that it is more demographically (e.g. SES, ethnicity, language) homogenous. Guelph officials believe that residents are inclined to participate because of strong environmental and rural roots (Siebel, 1993). All these characteristics suggest that Guelph's participation rate would be higher than the GTA. 		<ul style="list-style-type: none"> • It is difficult to predict the participation rate in Wet/Dry schemes. In Guelph, the Wet/Dry program achieved 62% diversion of the residential waste stream (City of Guelph, 1991). However, the project comprised fewer than 1000 residences, primarily single-family dwellings and extensive promotion and education (City of Guelph, 1991). Guelph is unlike the GTA in that it is more demographically (e.g. SES, ethnicity, language) homogenous. Guelph officials believe that residents are inclined to participate because of strong environmental and rural roots (Siebel, 1993). All these characteristics suggest that Guelph's participation rate would be higher than the GTA.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pick-up. • Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience. 	<ul style="list-style-type: none"> • Spring, summer, and fall reminders to low-density residences and apartment superintendents. 	<ul style="list-style-type: none"> • General acceptance of collection. Participation in drop-off expected to be low. • Probable decrease in proportion of household participants.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Residential composting participation is possible with those who have the facilities (Environics, 1990). It may be limited to physically mobile people with yard space. A high proportion of those with backyard composters use them. • Vermicomposting has not met with wide acceptance and appears to have low rates of participation. • Participation in community composting is uncertain, but expected to be low due to inconvenience. • Participation in multi-tenant composting activities in urban areas is uncertain but likely to be low. 	<ul style="list-style-type: none"> • Continue subsidies of unit, provide home delivery and provide multi-lingual instruction for household composters. • Support residents in multiple-family dwellings with promotion/education program and consultation program to define the best composting system for each building. • Support community composting with strong education/promotion and back up with proper management and community involvement in operations. 	<ul style="list-style-type: none"> • Vermicomposting likely to have low rates of participation. • Participation in community composting expected to be low. • Participation in backyard composting and level of use of composter may decrease.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods. • Greater participation by individuals in pick-up services (e.g., toxic taxis, mobile HHW depots, white goods and bulky items collection). • If HHW collection or depot is not convenient, it may lead to HHW in the wet or dry streams with potentially serious effects on the compost quality (Taylor, 1993). 	<ul style="list-style-type: none"> • Provide call in pick up service for bulky items and white goods. • Monitor the wet stream for HHW contamination. Emphasize HHW services in education/promotion. 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods. • Greater participation by individuals in pick-up services (e.g., toxic taxis, mobile HHW depots, white goods and bulky items collection). • If HHW collection or depot is not convenient, it may lead to HHW in the wet or dry streams with potentially serious effects on the compost quality (Taylor, 1993).
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • Municipalities may be hesitant to participate in Wet/Dry systems because of compost contamination concerns (e.g., Metro Toronto Wet/Dry Pilot, 1994) 	<ul style="list-style-type: none"> • Proper sorting by the majority of citizens is essential. 	<ul style="list-style-type: none"> • Municipalities may be hesitant to participate in Wet/Dry systems because of compost contamination concerns.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • In short term increasing awareness of availability of reusable goods. Increase in shopping at reuse centres. Longer term demand for used goods uncertain. 	<ul style="list-style-type: none"> • Support with promotion/education program emphasizing the benefits of reuse. • Province to consider sales tax reduction for the purchase of used goods. 	<ul style="list-style-type: none"> • Short term increase in shopping at reuse centres. Longer term uncertain.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Municipalities may be hesitant to participate in Wet/Dry systems because of potentially higher costs associated with sorting the various streams. 	<ul style="list-style-type: none"> • Proper sorting by the majority of citizens is essential. 	<ul style="list-style-type: none"> • Municipalities may be hesitant to participate in Wet/Dry systems because of potentially higher costs associated with sorting the various streams.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables, household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Provides additional opportunities to participate and should marginally increase participation by residents. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor increase in participation resulting from increased opportunity.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<p>Implementation of Wet/Dry City-wide program will require a high level of personal contact with the public and a very direct monitoring and feedback system (Hoornweg, Otten and Wong, 1993).</p> <p>Ongoing consultation with the public is essential (Siebel, 1993).</p>	<ul style="list-style-type: none"> • Promotion/education and public consultation programs would be essential to ensuring high levels of participation and adequate sorting on the part of residents. Implementation of a Wet/Dry system requires a significant altering of attitudes and behaviours on the part of citizens. These efforts should be targeted in particular to non-participating groups and residences subject to higher turnover. • Support schools with information, financial assistance and educational materials for 3Rs education. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. 	<ul style="list-style-type: none"> • Potentially positive effect through increased participation.

TABLE F11.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Wet/Dry
Indicator: Attitudes and Perceptions to 3RS Activities

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Self haul of garbage to landfills and transfer stations by residents Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Same as "Residential Recycling and Collection". Attitudes toward self-haul, landfill bans and regional recycling legislation uncertain. 	<ul style="list-style-type: none"> Same as "Residential Recycling and Collection". Mitigation not required 	<ul style="list-style-type: none"> Same as "Residential Recycling and Collection". Attitudes toward self-haul, landfill bans and regional recycling legislation uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<p>Initially, there will be extensive questions about the purpose and methods of the wet/dry system (Siebel, 1993).</p> <p>Many people may consider the wet/dry System as a technological fix to society's waste problem. Other jurisdictions have not implemented wet/dry systems because they don't actively force people to think about the 3Rs, only about source separation (Von Mirbach, 1993).</p> <p>Probably acceptable for low-density development, provided system is understood and convenient.</p> <p>Possibly unacceptable for high-density development. The need to source separate in a bin system and associated nuisance and convenience concerns may create negative attitudes for tenants.</p> <p>Building owners and managers may view the Wet/Dry System as unacceptable because of the potential for vermin, insects, odours, hygiene concerns and potential cost.</p> <p>Residents, in particular the elderly and disabled, may not accept Wet/Dry if inconveniences such as odour, waste sticking to bin and moving 90 gallon carts in winter are extensive.</p>	<p>Extensive promotion/education and public consultation programs will be essential to achieving needed levels of participation and correct sorting behaviour.</p> <p>Ensure convenience of system to maintain positive attitudes.</p> <p>Programs designed for specific community groups (i.e. sensitive to ethnic and language diversity) may lead to more positive attitudes (Lansana, 1992 and 1993; Howenstine, 1993; Hager, 1992).</p>	<p>There is no data on a North American wet/dry system in medium to high density urban areas. There is likely to be some opposition to the implementation of a wet/dry system from building owners, managers and residents because of costs and nuisance effects. Some concerns may be addressed by developing various alternative systems for large apartments or arranging for more frequent removal.</p> <p>Probably unacceptable in multi-family buildings.</p> <p>Residents, in particular the elderly and disabled, may not accept Wet/Dry if inconveniences such as odour, waste sticking to bin and moving 90 gallon carts in winter are extensive.</p>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the perceived need/benefit to use the backyard composter. 	<ul style="list-style-type: none"> • Spring, summer and fall reminders to low density residences and apartment superintendents. 	<ul style="list-style-type: none"> • General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the perceived need/benefit to use the backyard composter.
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Backyard composting acceptable for low density family households. Continued use and acceptance anticipated but participation and level of use may decline (A. Pollock, 1993). Evidence of acceptance for multi-family residents uncertain. Vermicomposting has not been accepted on a large scale; indications are that it may not be accepted in the long term. • Positive attitudes towards composting may not be enhanced as a more convenient alternative is provided. • Potential for multi-family building residents to develop negative attitudes toward composting if odour, insect and rodent problems and health concerns are prevalent. 	<ul style="list-style-type: none"> • Additional education/promotion on the benefits of household composting. 	<ul style="list-style-type: none"> • Positive attitudes towards composting may not be enhanced as a more convenient alternative is provided. • Potential for multi-family residents to develop a negative attitude toward composting if odour, insect and rodent problems and health concerns are prevalent.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Minor positive attitudinal effect to support 3Rs by the provision of other convenient recycling options. • HHW collection and drop-off days have a positive effect as social awareness is created about household hazardous waste. • Could be concerns regarding spills by toxic taxi and mobile HHW depot, but generally people are familiar with HHW and accepting of its management. • Possible concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material. • Possible short-term concerns about reductions in white goods collection. 	<ul style="list-style-type: none"> • Ensure public consultation and participation to address concerns related to HHW. 	<ul style="list-style-type: none"> • Minor positive attitudinal effect to support 3Rs by the provision of other convenient recycling options.
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. The addition of increased amounts of "wet" waste from the Wet/Dry System may aggravate the problem. 	<ul style="list-style-type: none"> • Ensure public consultation and participation as part of the siting and monitoring process, and to address concerns related to existing composting facilities. 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. The addition of increased amounts of "wet" waste from the Wet/Dry System may aggravate the problem.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	Positive, public and municipal attitudes; socially and environmentally beneficial. Should reinforce positive attitudes to the 3Rs.	Mitigation not required	Positive effect by reinforcing positive attitudes to the 3Rs.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	Currently acceptable; traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.	Address nuisance effects at existing facilities	Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<p>Encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment.</p>	<p>Attitudes may be enhanced by informing residents as to the success of the program (Siebel, 1993).</p>	<p>Positive effect; encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment.</p>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • Increase awareness of the need for and benefits of 3Rs and the Wet/Dry system. • Consumer education will promote change in shopping behaviour, changes in product design (durable, repairable) and packaging (reduction and recyclable). 	<ul style="list-style-type: none"> • Broad expansion of promotion and education programs including telephone "hotlines". • The public will need extensive information, education and consultation on the Wet/Dry System (Objectives, Methods, Participation, etc.). • Support schools with information, financial assistance and educational materials for 3Rs education. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. 	<ul style="list-style-type: none"> • Increase awareness of the need for and benefits of 3Rs and Wet/Dry. Will motivate people to participate. Will educate people on how to participate in a constructive fashion.

TABLE H11.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Wet/Dry
Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal	<ul style="list-style-type: none"> Curbside collection of residential waste from single family dwellings in three streams by specially designed trucks by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units in three streams by municipal forces or private contractors, where feasible Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Self haul of garbage to landfills and transfer stations by rural residents Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
<p>Residential Recycling and Collection</p> <ul style="list-style-type: none"> • Provide carts to all single family households and some "other" households • Separation of waste into three streams (wet, dry, and garbage) by the householder • Expanded set of dry materials to be collected, including plastics, (PET, rigid plastic, bottles & tubes , film plastic, foam plastic and rigid trays); paper fibre (ONP, OCC, boxboard, polycoat, phone books, magazines and catalogues and mixed household paper); metal (steel and aluminum cans, aluminum trays and foil), clear and coloured glass and textiles • Recycling services at all multi-family buildings with 6 or more units (3R's Regulations) • Large bins provided in the garbage management area of multi-family buildings, where space permits Residents will be encouraged to separate their waste into three separate bags 	<p>Residents and municipalities have been willing to pay part of the costs of operating the traditional Blue Box system. Uncertain if municipalities are willing to accept the costs of the Wet/Dry System. However, the capital costs may be significant (sorting facilities, trucks for 3 streams, 3 bins/household, etc.)</p> <p>If the wet/dry system is costly to apartment owners/managers, there will be resistance to pay. As the costs of the wet/dry system are unknown, the effect is unknown.</p>	<p>The region could provide advice/audits to apartment owners on the best and lowest cost Wet/Dry System.</p>	<ul style="list-style-type: none"> • If the wet/dry system is costly to apartment owners/managers, there will be resistance to pay. • The willingness of municipalities to pay the costs of the wet/dry system is unknown. Municipalities may be hesitant to participate in wet/dry system because of potentially higher costs.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Collection of leaf and yard waste as part of three stream pick-up • Separate brush collection • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> Additional costs of leaf and yard waste collection and composting are currently acceptable to residents, but costs may become an issue in the future. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Additional costs of leaf and yard waste collection and composting are currently acceptable to residents, but costs may become an issue in the future.
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher costs for composters for those who have not purchased a composter. Uncertain of the willingness of landlords and tenants to pay for bins. Most likely will not be willing to pay the additional costs. 	<ul style="list-style-type: none"> Support promotion of composting with education on benefits. Continue/increase subsidy for composters. 	<ul style="list-style-type: none"> A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher costs for composters or for those who have not purchased a composter. Uncertain of the willingness of landlords and tenants to pay for bins. Most likely will not be willing to pay the additional costs.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc.) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Uncertain of the municipalities willingness to pay for white goods and HHW collection. Willing to pay for depots. 	<ul style="list-style-type: none"> • Region/Province to examine product stewardship for white goods. • Region/Province to examine effectiveness of HHW management, and examine possibilities for joint programs with private sector. 	<ul style="list-style-type: none"> • Municipalities may be less willing to pay the cost of white goods and HHW pick up.
Composting Facilities <ul style="list-style-type: none"> • Central composting facilities (in vessel or windrow) for composting of source separated household organics (wet stream) and leaf and yard waste 	<ul style="list-style-type: none"> • Region and residents willing to partially fund the existing leaf and yard waste composting facilities. If household "wet" waste is to be added, there will be a need for increased capacity and increased costs. Regions and residents may be unwilling to pay these costs. 	<ul style="list-style-type: none"> • Education program to address the benefits and the need for composting facilities. 	<ul style="list-style-type: none"> • Region and residents willing to partially fund the existing leaf and yard waste composting facilities. If household "wet" waste is to be added, there will be a need for increased capacity and increased costs. Regions and residents may be unwilling to pay these costs.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough). • Non-profit reuse centre (WASTEWISE, Halton). • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.). • Food reuse organization (such as Second Harvest). • Special goods exchange days 	<ul style="list-style-type: none"> • Some people are willing to purchase used goods (Quinte Regional Recycling, 1993). If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Local governments and residents appear willing to pay for the facilities. If household "dry" waste is to be sorted, there will be a need for increased capacity and sorting capability and therefore increased costs. Regions and residents may be unwilling to pay these costs, if they are high. 	<ul style="list-style-type: none"> • Education program to address the benefits and the need for recycling facilities. 	<ul style="list-style-type: none"> • Local governments and residents appear willing to pay for the facilities. If household "dry" waste is to be sorted, there will be a need for increased capacity and increased sorting capability and therefore increased costs. Regions and residents may be unwilling to pay these costs, if they are high.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at compost facility to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Local governments and residents appear willing to pay for the facilities. If household "dry" waste is to be sorted, there will be a need for increased capacity and increased sorting capability and therefore increased costs. Regions and residents may be unwilling to pay these costs, if they are high. 	<ul style="list-style-type: none"> • Education program to address the benefits and the need for recycling facilities. 	<ul style="list-style-type: none"> • Local governments and residents appear willing to pay for the facilities. If household "dry" waste is to be sorted, there will be a need for increased capacity and increased sorting capability and therefore increased costs. Regions and residents may be unwilling to pay these costs, if they are high.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program for wet/dry system • Promotion/education program for source reduction, precycling, reuse and recycling 	<ul style="list-style-type: none"> • Local government and residents are likely to support this activity. 	<ul style="list-style-type: none"> • Programs should be linked to a public consultation program to address the specific needs of each region. • Increase funding of 3Rs education at local level. 	<ul style="list-style-type: none"> • Local government and residents likely to continue to support this activity.

TABLE F12.1
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Mixed Waste Processing
Indicator: Participation in 3R's by Individuals, Municipalities, IC&I Sector, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities Collection of residential garbage from multi-family units by municipal forces or private contractors Self haul of garbage to landfills and transfer stations by rural residents Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> Recycling legislation forces participation in removing materials from the waste stream, although some residents will not support it. In the longer term it is likely to become acceptable and participation is likely to increase. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Recycling legislation forces participation in removing materials from the waste stream, although some residents will not support it. In the longer term it is likely to become acceptable and participation is likely to increase.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • High participation rates but vary with municipality (Environics, 1990; Hay, ND). • Greatest participation by single family residences (Gale, 1990; Environics, 1990; Hay, ND). • Some groups (e.g., lower SES) and households potentially less accepting/willing to participate (Lansana, 1992; Howenstine, 1993; Everett et al., 1992; Environics, 1990; Hay, ND). • Will allow residents of multiple-family residences the opportunity to participate resulting in an overall increase in participation. • Some residents are likely to decide not to source separate some or all of their recyclables and food waste knowing that it will be separated for them at the central Mixed Waste Processing and Composting facility. • Mixed waste processing conflicts with a philosophy of personal involvement in 3Rs; some municipalities may not want to be involved on that basis. • With an aging population, the elderly may have some difficulties in participating in source separation. 	<ul style="list-style-type: none"> • To encourage apartment dwellers to participate, use apartment committee and block volunteer approach (Bagby, 1993) and ensure distribution of clear information (Hager, 1992; Spaccarelli, 1990). • Work with apartment building owners/managers to develop most appropriate collection system (Von Mirbach, 1993; Hager, 1990). • Additional measures (e.g., block-leader approaches) may be needed to involve different ethnicities and lower SES groups (Bagby, Diangson and Patterson, 1992; Burn, 1991; Everett et al., 1992; Howenstine, 1993; Lansana, 1991; Hager, 1992). • Modify program as required to address concerns of elderly (Bagby, 1993). 	<ul style="list-style-type: none"> • Potentially greater participation throughout residential sector with largest gains in multi-family, lower socio-economic and ethnic groups. • Some residents are likely to decide not to source separate some or all of their recyclables and food waste knowing that it will be separated for them at the central Mixed Waste Processing and Composting facility. • Mixed waste processing conflicts with a philosophy of personal involvement in 3Rs; some municipalities may not want to be involved on that basis.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pick up. • Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience. 	<ul style="list-style-type: none"> • Spring, Summer, and Fall reminders to low density residences and apartment superintendents. 	<ul style="list-style-type: none"> • General acceptance of collection. • Probable decrease in proportion of household participants. Participation in drop-off expected to be low.
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Residential composting participation is possible with those who have the facilities (Environics, 1990). It may be limited to physically mobile people with yard space. A high proportion of those with backyard composters use them. • Vermicomposting has not met with wide acceptance and appears to have low rates of participation. • Participation in community composting is uncertain, but expected to be low. 	<ul style="list-style-type: none"> • Continue subsidies of units, provide home delivery and provide multi-lingual instruction for household composters. • Support residents in multiple-family dwellings with promotion/education and consultation program to define the best composting system for each building. • Support community composting with strong education/promotion and back up with proper management and community involvement in operations. 	<ul style="list-style-type: none"> • Vermicomposting has not met with wide acceptance and will probably have low rates of participation. • Participation in community composting is uncertain, but expected to be low, due to availability of more convenient option. • Participation in backyard composting and level of use of composter likely to increase.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods. • Greater participation by individuals in pick-up services (eg. toxic taxis, mobile HHW depots, white goods collection). 	<ul style="list-style-type: none"> • Provide call-in pick-up service for white goods. 	<ul style="list-style-type: none"> • Residents of municipalities without white goods collection may not be willing/able to drop off white goods. • Greater participation by individuals in pick-up services (eg. toxic taxis, mobile HHW depots, white goods collection).
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • In short term increasing awareness of availability of reusable goods. Increase in shopping at reuse centres. Longer term demand for used goods uncertain. 	<ul style="list-style-type: none"> • Support with promotion/education program emphasising the benefits of reuse. • Province to consider sales tax reduction for the purchase of used goods. 	<ul style="list-style-type: none"> • Short term increase in shopping at reuse centres. Longer term uncertain.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • No effect 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Provides greater opportunity to recycle and may increase participation somewhat. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential minor increase in participation resulting from increased opportunity.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<p>Generally acceptable and important to maintaining and increasing participation. Indications from response to hot lines, etc. are that people want more information (Environics, 1990; Watson, 1993).</p>	<ul style="list-style-type: none"> • Expand and refine promotion/education programs as required based on changing demographics, ethnic/language groups (Bagby, Diangson, and Patterson, 1992). • Promotional/Education programs should be based on the successful programs identified in the 3Rs literature (e.g., Folz and Hazlett, 1990). For example, pamphlets & brochures (in utility bills, etc.) and community information meetings. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. • Support schools with information, financial assistance and educational materials for 3Rs education. The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. Many school boards have environmental education committees. 	<ul style="list-style-type: none"> • Potentially positive effect through increased participation in 3Rs activities.

TABLE F12.2
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Mixed Waste Processing
Indicator: Attitudes and perception to 3Rs Activities

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	<ul style="list-style-type: none"> • Attitudes toward self-haul, landfill bans and regional recycling legislation uncertain, but some people may dislike legislation. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Attitudes toward self-haul, landfill bans and regional recycling legislation uncertain.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Provision of recycling service to all apartments over 6 units should provide long term support for 3Rs and should increase waste diversion. In particular if apartment owners/managers are able to choose the system for their building. • Acceptable in low-density areas. 	<ul style="list-style-type: none"> • Continue to support with promotion/education programs. • Ensure convenience of system to maintain positive attitudes. • Programs designed for specific community groups (i.e. sensitive to ethnic and language diversity) may lead to more positive attitudes. 	<ul style="list-style-type: none"> • Provision of recycling service to all apartments over 6 units should provide long term support for 3Rs and should increase positive attitudes to waste diversion. In particular if apartment owners/managers are able to choose the system for their building.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the amount of back yard composting undertaken. 	<ul style="list-style-type: none"> • Spring, summer and fall reminders to low density residences and apartment superintendents. 	<ul style="list-style-type: none"> • General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the amount of back yard composting undertaken.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting <ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting 	<ul style="list-style-type: none"> • Backyard composting acceptable for low density family households. Continued use and acceptance anticipated, but participation and level of use may decline (A. Pollock, 1993). Evidence of acceptance for multi-family building residents uncertain. Vermicomposting has not been accepted on a large scale; indications are that it may not be accepted in the long term. • Positive attitudes towards composting may not be enhanced, as a more convenient alternative is provided. • Potential for multi-family building residents to develop negative attitudes toward composting if odour, insect and rodent problems and health concerns persist. 	<ul style="list-style-type: none"> • Provide promotion/education and consultation program for multi-family residences. • Positive attitudes towards composting will be enhanced, provided the nuisance concerns are mitigated. 	<ul style="list-style-type: none"> • Potential for multi-family residents to develop negative attitudes toward composting if odour, insect and rodent problems and health concerns persist. • Potential reduction in participation/use of backyard composting.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc) <ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots 	<ul style="list-style-type: none"> • HHW collection and drop-off days have a positive effect as social awareness is created about household hazardous waste. • Could be concerns regarding spills by the toxic taxi and mobile HHW depot, but generally people are familiar with HHW and accepting of its management. • Potential concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material. • Potential short-term concerns about reductions in white goods collection. 	<ul style="list-style-type: none"> • Ensure public consultation and participation to address concerns related to HHW. 	<ul style="list-style-type: none"> • Minor positive attitudinal effect by provision of other convenient recycling options.
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. 	<ul style="list-style-type: none"> • Ensure public consultation and participation as part of the siting and monitoring process, and to address concerns related to existing composting facilities. 	<ul style="list-style-type: none"> • Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. • Mixed waste processing may lead to very negative attitudes and perceptions.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> Positive public and municipal attitudes; socially and environmentally beneficial. Should reinforce positive attitudes to the 3Rs. 	<ul style="list-style-type: none"> Mitigation not required 	<ul style="list-style-type: none"> Positive effect by reinforcing positive attitudes to the 3Rs.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> Currently acceptable. Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location. 	<ul style="list-style-type: none"> Address nuisance effects at existing facilities. 	<ul style="list-style-type: none"> Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment. 	<ul style="list-style-type: none"> • Attitudes may be enhanced by informing residents as to the success of the program (Siebel, 1993). 	<ul style="list-style-type: none"> • Positive effect: encourages positive attitudes and perceptions that the individual/family can contribute to improving the environment.
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Increases awareness of the need for and benefits of 3Rs. Will motivate people to participate. • Consumer education will promote change in shopping behaviour changes in product design (durable, repairable) and packaging (reduction and recyclable). 	<ul style="list-style-type: none"> • Expand promotion and education programs. • Support schools with information, financial assistance and educational materials for 3Rs education. • Provide seminars, technical assistance and financial assistance to landlord organizations. • Develop programs and support voluntary organizations who assist in 3Rs initiatives. • Stimulate and assist tenant organizations to become active in 3Rs activities; provide education programs for superintendents. 	<ul style="list-style-type: none"> • Increase awareness of the need for and benefits of 3Rs. Will motivate people to participate. • Consumer education will promote change in shopping for changes in product design (durable, repairable) and packaging (reduction and recycle).

TABLE F12.3
GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY : GTA
CRITERION : Social Acceptability

System : Residential Mixed Waste Processing
Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal <ul style="list-style-type: none"> • Curbside collection of residential garbage from single family dwellings by municipal forces or contractors to municipalities • Collection of residential garbage from multi-family units by municipal forces or private contractors • Self haul of garbage to landfills and transfer stations by rural residents • Regional recycling legislation (e.g. collection ban on grass clippings, Oakville) • Landfill bans on some items (e.g. recyclable materials, tires, white goods, etc.) with disposal surcharges and rejection of some loads 	No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection <ul style="list-style-type: none"> • Blue Box recycling mandated by provincial regulations for municipalities with more than 5,000 population • Expansion of curbside collection of Blue Box materials from single family dwellings in some municipalities to include all materials designated basic Blue Box waste and at least two materials designated as supplementary Blue Box waste in the 3Rs Regulations • Curbside collection of additional dry materials • Recycling services at all multi-family buildings with 6 or more units • Collection of bins of recyclables from multi-family units 	<ul style="list-style-type: none"> • Residents and municipalities are willing to pay part of the cost of operating the collection system. Uncertain if all municipalities in regions are willing to accept a reduction in subsidies. • Increased costs for landlord of providing recycling services likely to be passed on to tenants in rent increases. Willingness of tenants to pay increased rent is unknown. 	<ul style="list-style-type: none"> • The region could provide advice/audits to apartment owners on the best and lowest cost recycling opportunities. 	<ul style="list-style-type: none"> • In short term uncertain if tenants and landlords are willing to assume additional costs for recycling services. • Uncertain if all municipalities are willing to take on extra costs.
Residential Leaf and Yard Waste Collection <ul style="list-style-type: none"> • Seasonal curbside collection of leaf and yard waste • Drop-off depot for leaf and yard waste (depots located at landfill and other convenient sites) 	<ul style="list-style-type: none"> • Potential future concerns about the cost of leaf and yard waste collection and composting and the willingness of residents and municipalities to pay for collection and composting. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Potential future concerns about the cost of leaf and yard waste collection and composting and the willingness of residents and municipalities to pay for collection and composting.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting	<ul style="list-style-type: none"> • Door to door distribution of backyard composters to 80% of single family households • Large 3-bin composting units distributed to apartment and co-operative housing complexes • Promotion of vermicomposting to multi-family units • Promotion of community composting <p>A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost for composters for those who have not purchased a composter.</p> <p>Uncertain of the willingness to pay by landlords and tenants for facilities.</p> <p>Most likely will not be willing to pay for high costs.</p>	<ul style="list-style-type: none"> • Support promotion of composting with education on benefits. • Continue/increase subsidy for composters. 	<p>A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have not purchased a composter.</p> <p>Uncertain of the willingness to pay by landlords and tenants for facilities.</p> <p>Most likely will not be willing to pay for high costs.</p>
Other Residential Waste Diversion (HHW, Toxic Taxi, White Goods, etc)	<ul style="list-style-type: none"> • Special curbside collections of Christmas trees • Special and weekly curbside collections of white goods. • Drop-off depots for white goods • Special curbside collection for bulky items (furniture) • Permanent drop-off depots for household hazardous waste (HHW) • Special household hazardous waste drop-off days (one per year, one per months etc.) • Toxic Taxi service for collection of large quantities of HHW at the household • Mobile HHW depots <p>Uncertain of the willingness of municipalities to pay for white goods and HHW collection. Willing to pay for depots.</p>	<ul style="list-style-type: none"> • Region/Province to examine product stewardship for white goods. • Region/Province to examine effectiveness of HHW management, and examine possibilities for joint programs with private sector. 	<p>Municipalities may be less willing to pay the cost of white goods pick up and HHW.</p>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities <ul style="list-style-type: none"> • Centralized windrow composting of leaf and yard waste • New mixed waste processing and composting facility 	<ul style="list-style-type: none"> • Unlikely municipalities and residents willing to pay for facilities. 	<ul style="list-style-type: none"> • Education program to address the benefits and the need for composting facilities. 	<ul style="list-style-type: none"> • Unlikely municipalities and residents willing to pay for facilities.
Reuse Centres and Activities <ul style="list-style-type: none"> • Municipal reuse centre • Private reuse centre (e.g. Re-Uze, Scarborough) • Non-profit reuse centre (WASTEWISE, Halton) • Charitable reuse centres run by social service organizations (Goodwill, Salvation Army, etc.) • Food reuse organization (such as Second Harvest) • Special goods exchange days 	<ul style="list-style-type: none"> • Some people are willing to purchase used goods (Quinte Regional Recycling, 1993). If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.
MRFs <ul style="list-style-type: none"> • Processing centres (MRFs) for dry recyclables collected from the residential (and minor amounts from the commercial/institutional) sector. • Construct new MRF and expand existing MRF(s) to process larger stream of dry recyclables 	<ul style="list-style-type: none"> • Uncertain if municipalities and residents appear willing to pay for the facilities provided subsidies continue. 	<ul style="list-style-type: none"> • Mitigation not required 	<ul style="list-style-type: none"> • Uncertain if municipalities and residents appear willing to pay for the facilities, provided subsidies continue.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations <ul style="list-style-type: none"> • Drop-off depots for dry recyclables • Depots located at transfer stations to provide recycling opportunities to self-haul generators • Drop-off depots for multi-family residents not serviced by recycling • Drop-off depot for rural households • Community Recycling Centres to accept recyclables household hazardous waste, reusable items and residential waste • Satellite drop-off facilities for recycling (neighbourhood recycling depots and mini recycling depots) 	<ul style="list-style-type: none"> • Uncertain if municipalities and residents appear willing to pay for the facilities provided subsidies continue. 	<ul style="list-style-type: none"> • Subsidies from private sector or government 	<ul style="list-style-type: none"> • Municipalities and residents appear willing to pay for the facilities provided subsidies continue
Residential Promotion and Education <ul style="list-style-type: none"> • 3Rs promotion and education program, focused on the residential sector • Consumer education program to reduce waste generation, includes videos, posters, calendars, pamphlets, advertisements etc. • Promotion/education program on source reduction, pre-cycling, reuse and recycling 	<ul style="list-style-type: none"> • Municipalities and residents likely to continue to support this activity. 	<ul style="list-style-type: none"> • Programs should be linked to a public consultation program to address the specific needs of each region. • Increase funding of 3Rs education at local level. 	<ul style="list-style-type: none"> • Municipalities and residents likely to continue to support this activity



(16128)

TD/789/T6/G74/APP-SEF/MOE

TD/789/T6/G74/APP-SEF/MOE
Ontario Ministry of Enviro
Greater Toronto area
3Rs analysis - arzd
c.1 a aa